2002 4th QUARTER GROUNDWATER MONITORING REPORT

FOR

FORMER ANGELES CHEMICAL COMPANY FACILITY 8915 SORENSEN AVENUE SANTA FE SPRINGS, CALIFORNIA

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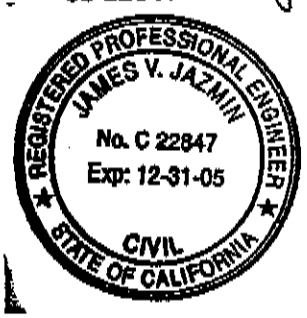

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1.0) INTRODUCTION

Blakely Environmental Investigations, Inc. (BEII) was contracted by Greve Financial Services ((310) 753-5770) to perform quarterly groundwater monitoring at the former Angeles Chemical Company (ACC), Inc. facility located at 8915 Sorensen Avenue, Santa Fe Springs, California (See Figure 1, Site Location Map). The quarterly groundwater monitoring was requested by the Department of Toxics Substance Control (DTSC) correspondence dated September 18, 2001. This report presents the results of the 2002 4th quarter monitoring episode performed from December 17 through 19, 2002.

2.0) SITE LOCATION AND HISTORY

The site is approximately 1.8 acres in size and completely fenced. The site is bound by Sorensen Avenue on the east, Air Liquide Corporation to the north and northwest, Plastall Metals Corporation to the north, and a Southern Pacific Railroad easement and Mckesson Chemical Company to the south.

The property was owned by Southern Pacific Transportation Company and was not developed until 1976.

The ACC has operated as a chemical repackaging facility since 1976. A total of thirty-four (34) underground storage tanks (USTs) existed beneath the site. Two (2) USTs, one gasoline and one diesel, and sixteen (16) chemical USTs were excavated and removed under the oversight of the Santa Fe Springs Fire Department. All 16 remaining chemical USTs were decommissioned in place and slurry filled.

In January 1990, SCS Engineers, Inc. (SCS) conducted a site investigation. SCS advanced eight borings from 5' below grade (bg) to 50' bg. Soil samples collected and analyzed identified benzene, 1,1-Dichloroethane (1,1-DCA), 1,1-Dichloroethene (1,1-DCE), MEK, methyl isobutyl ketone (MIBK), toluene, 1,1,1 Trichloroethane (1,1,1-TCA), Tetrachloroethylene (PCE), and xylenes at detectable concentrations.

In June 1990, SCS performed an additional site investigation at the site by advancing six additional borings advanced from 20.5' bg to 60' bg. A monitoring well (MW-1) was also installed. Soil sample analysis identified detectable concentrations of the above mentioned VOCs in addition to acetone and methylene chloride. Dissolved benzene, 1,1-DCA, 1,1-DCE, PCE, Trichloroethylene (TCE), and trans-1,2-dichloroethene were detected in MW-1 above maximum contaminant levels.

Between 1993 and 1994, SCS performed further testing at the site. Soil samples were collected from nine borings. Five borings were converted to groundwater monitoring wells MW-2, MW-3, MW-4, MW-6, and MW-7 (See Figure 2, Well Location Map). The predominant compounds detected in soil were acetone, MEK, MIBK, PCE, toluene, 1,1,1-TCA, TCE, and xylenes. Groundwater sample collection performed in

February 1994 by SCS identified the following using EPA method 624 (laboratory results included in Remedial Investigation Report dated August 1994 by SCS):

Component Analyzed	MW-1	MW-2	MW-3	MW-4	MW-6	MW-7
Benzene	194	<100	63	111	795	46
1,1-DCA	649	1,130	85	1,410	2,260	2,130
1,2-DCA	<100	<100	<50	<100	1,140	31
1,1-DCE	2,210	2,460	2,800	806	1,240	151
Ethylbenzene	333	1,720	105	1,180	1,910	45
Methylene Chloride	1,220	2,980	6,530	4,760	21,400	<50
PCE	662	2,150	5,370	3,320	2,130	134
Toluene	560	7,390	579	12,700	13,500	398
1,1,1-TCA	9,370	3,470	444	36,200	114,000	90
TCE	7,160	3,040	1,730	14,300	1,320	45
Xylenes	1,750	7,790	1,014	4,362	4,710	186
Units	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L

In 1996, SCS performed separate soil vapor extraction pilot testing beneath the site at approximately 10' bg and 22' bg. Laboratory analysis identified maximum soil vapor gas concentrations as 1,1,1-TCA (30,300 ppmV) with detectable concentrations of 1,1-DCE, TCE, methylene chloride, toluene, PCE and xylenes. The maximum radius of influence from the various extraction units used were measured as 35 feet at 10' bg and 80 feet at 22' bg.

In November 1997, SCS performed a soil vapor survey at the site. Soil vapor samples were collected at twenty-three locations at 5' bg. In addition, soil vapor samples were collected at 15' bg in five of the twelve sampling points. The soil vapor survey identified maximum volatile organic compound (VOC) contaminants near the railroad tracks on site, the location where a rail tanker reportedly had an accidental release.

In July 2000, BEII contracted BLC Surveying, Inc. to perform a site survey. Well locations were recorded using the California Plane coordinate systems. A copy of the survey is on file with the DTSC.

In September 2000, Blaine Tech Services, Inc. gauged the six on-site monitoring wells (MW-1, MW-2, MW-3, MW-4, MW-6, and MW-7) under the supervision of BEII. Free product (FP) was identified in monitoring well MW-4 at 0.21-feet in thickness. Approximately 0.5 liters of FP were removed from the well and placed in a sealed 55-gallon drum.

BEII performed a soil vapor gas survey at the site from November 27 to December 1, 2000. A total of 36 soil vapor sample points, labeled SV1 through SV36, were selected by BEII and approved by the DTSC for analysis. Two discrete soil vapor samples were collected from each soil vapor sample point, one at 8' bg and one at 20' bg. SV1 was an exception since the first soil vapor sample was collected at 10' bg instead of

8' bg. Based on the soil vapor sample results, BEII identified relatively low level concentrations of VOCs in the silty clay soils at 8' bg. However, the concentrations of VOCs are significantly higher in the sandy soils at 20' bg in OU-1. Results were submitted to the DTSC by BEII in a Report of Findings dated January 10, 2001 with laboratory reports (BEII Report of Findings dated January 10, 2001).

On November 30, 2000, Blaine Tech Services, Inc. (Blaine) was contracted to perform groundwater sampling at the site. Groundwater monitoring wells MW-4 and MW-6 identified were not sampled due to the presence of free product. These wells were installed to monitor a perched groundwater body to the north. Free product was identified in MW-1 during sample collection, upon completion of well purging. The potentiometric groundwater level was above the well screen. Groundwater purging lowered the potentiometric level below the screened interval, allowing free product to enter. Groundwater sample analysis identified thirteen constituents of concern (COCs) in the dissolved phase as VOCs only. Laboratory analysis of metals and SVOCs identified concentrations below allowable levels for those constituents. Results were submitted by BEII to the DTSC in a Report of Findings dated January 10, 2001 with laboratory reports.

The remaining USTs have been excavated or slurry filled for closure under the supervision of the Santa Fe Springs fire Department. A report was be submitted to the DTSC upon completion by EREMCO.

BEII performed a soil gas survey on the ACC site from January 14 to January 17, 2002. The purpose of the soil gas survey was to determine the lateral extent of VOC soil vapors in the vadose zone along the eastern, northern, and southern property line of the site (OU-1 an OU-2). In addition, BEII performed a SGS on June 13, 2002 on the Air Liquide property to determine the lateral extent of VOC soil vapors in the vadose zone north of the ACC facility (OU-1). Based on the soil gas survey results, BEII identified relatively low level concentrations of VOCs in the silty clay soils at 5' bg, 7'bg, 8' bg, 10' bg, and 12' bg (See Table 1 through Table 3 for soil gas results). However, the concentrations of VOCs are significantly higher in the sandy soils at 20' bg, which are more permeable and conducive to soil vapor migration. Furthermore, VOC soil gas concentrations were higher along the southern property line (OU-2) than along the east and north property line. Results were submitted by BEII to the DTSC in a Report of Findings dated October 15, 2002 with laboratory reports.

BEII advanced two soil borings (BSB-1 and BSB-2) and installed two groundwater monitoring wells (MW-8 and MW-9) on the ACC site from June 5 to June 7, 2002. The purpose of the drilling was to help define the lateral and vertical extent of impacted soil along the eastern ACC property line and to help determine the extent of impacted groundwater. Soil borings BSB-1 and BSB-2 were advanced to 50' bg and 30' bg, respectively. Monitoring wells MW-8 and MW-9 were installed to 40.5' bg and 45.5' bg, respectively. Soil sample results identified only four VOCs in the upper clay layer from 0' to approximately 20' bg. Total VOC soil concentrations averaged 56.66 µg/kg in the upper clay zone. Soil sample results identified elevated VOC concentrations in sand

with lower to no detectable concentrations in the underlying clay layer. The average total VOC soil concentrations were 53,125 µg/kg in the permeable sand layer. The underlying clay layer identified an average total VOC soil concentration of 408 µg/kg. Results were submitted by BEII to the DTSC in a Report of Findings dated October 15, 2002 with laboratory reports.

BEII advanced eight soil borings (BSB-3 through BSB-10) from 40' bg to 45' bg in August 2002 to help determine the extent of impacted soil. Laboratory results were submitted by BEII to the DTSC.

In November and December of 2002, BEII advanced seven borings (BSB-11 through BSB-17) and installed twelve monitoring wells (MW-10 through MW-21) to help define the extent of VOC impacted soil and groundwater. Monitoring well MW-1 was abandoned. Laboratory results were submitted by BEII to the DTSC.

3.0) REGIONAL GEOLOGY/HYDROGEOLOGY

The site is located near the northern boundary of the Santa Fe Springs Plain within the Los Angeles Coastal Plain at an elevation of approximately 150 feet above mean sea level. Surficial sediments consist of fluvial deposits composed of inter-bedded gravel, sand, silt, and clay. Available data from California Water Resources Bulletin No. 104 (June 1961) indicate that the surficial sediments may be Holocene and/or part of the upper Pleistocene Lakewood Formation, which ranges from 40 to 50 feet thick beneath the site. The Lakewood Formation has lateral lithologic changes with discontinuous permeable zones that vary in particle size. Stratified deposits of sand, silty sand, silt, and fine gravel comprising the upper portion of the lower Pleistocene San Pedro Formation underlies the Lakewood Formation.

The site lies within the Central Basin Pressure area, a division of the Central Ground Water Basin, which extends over most of the Coastal Plain. The Gasper aquifer, a part of the basal coarse unit of Holocene deposits, is found within old channels of the San Gabriel and other rivers. The Gasper aquifer may be 40-feet in thickness, with its base at a depth of about 80 to 100-feet bg. The underlying Gage aquifer is found within the Pleistocene Lakewood Formation. The Hollydale aquifer is the uppermost regional aquifer in the Pleistocene San Pedro Formation. Bulletin 104 indicates that this aquifer averages approximately 30-feet in thickness in this area, with its top at a depth of about 70 feet bg. The major water producing aquifers in the region are the Lynwood aquifer located approximately 200-feet bg, the Silverado aquifer located at approximately 275-feet bg, and the Sunnyside aquifer located at approximately 600-feet bg.

4.0) SITE GEOLOGY/HYDROGEOLOGY

SCS identified silty clays with some minor amounts of silt and sand in the shallow subsurface from surface grade to approximately 15' bg. Below the silty clay, poorly sorted coarse-grained sand and gravel from 15' bg to 26' bg. SCS referenced a less

permeable silty clay layer between 35' and 50' bg, which contained stringers of fine sand and silt that is part of the Gaspur/Hollydale aquifer.

A perched aquifer was encountered at approximately 23' bg by SCS and referenced as such by SCS. Based on a review of McKesson files, Harding Lawson Associates (HLA) stated that in January 1975 prior to McKesson operating their neighboring facility, no groundwater was encountered to a depth of 45' bg beneath the McKesson property. In March 1986, during operation of the neighboring McKesson facility, groundwater was encountered at 22' bg beneath the McKesson property as stated by HLA. Based on the HLA statements, BEII concludes with SCS that the first encountered groundwater is part of a shallow perched aquifer. The sediments within this perched aquifer appear to be consistent with the Gasper Aquifer. Monitoring wells MW-4, MW-6, MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-16, MW-18, and MW-19 will be noted as Gasper monitoring wells with groundwater at approximately 30' bg.

SCS also referenced that the Gaspur/Hollydale Aquifer was encountered at 20' to 35' bg beneath the site. Further review of Bulletin 104 by BEII and DTSC, identified that the SCS referenced Gaspur/Hollydale Aquifer was in fact the Gage/Hollydale Aquifer. Monitoring wells MW-2, MW-3, MW-13, MW-14, MW-15, MW-17, MW-20, and MW-21 will be noted as Gage/Hollydale monitoring wells since they are screened in that deeper groundwater which is now at approximately 40' bg.

The groundwater gradient flowed historically to the southwest as identified by SCS. In December 2002, the shallow groundwater was identified at depths between 26.28' bg to 44.22' bg beneath the site. The groundwater flow direction of this shallow zone (Gasper Aquifer) is north northeast with a hydraulic gradient of 0.01 ft/ft (See Figure 3). Groundwater in the deeper Gage/Hollydale Aquifer flows in the west southwest direction with a relatively flat hydraulic gradient of 0.0058 ft/ft (See Figure 4).

5.0) GROUNDWATER MONITORING PROTOCOL

The purpose of the proposed groundwater monitoring was to provide data regarding the piezometric surface, water quality, and the presence of free product (FP), if any on a quarterly basis to the DTSC. Groundwater monitoring consisted of such activities as water level measurement, well sounding for detection of FP, collection of groundwater samples, field analysis, laboratory analysis, and reporting. The proposed work was performed as follows:

The depth to groundwater was measured in each well using a decontaminated water level indicator capable of measuring to with 1/100th of a foot. Prior to and following collection of measurements from each well, the portions of the water level indicator entering groundwater were decontaminated using a 3-stage decontamination procedure consisting of a potable wash with water containing Liquinox soap followed by a double purified water rinse. Wells were monitored in the order of least contaminated to the most contaminated based on past analysis. For the ACC wells, the following order of

wells was followed: MW-17, MW-9, MW-16, MW-7, MW-12, MW-13, MW-2, MW-15, MW-3, MW-21, MW-18, MW-20, MW-14, MW-11, MW-19, MW-10, MW-4, MW-6, and MW-8.

The well box and casing were opened carefully to preclude debris or dirt from falling into the open casing. Once the well cap was removed, the water level indicator was lowered into the well until a consistent tone was registered. Several soundings were repeated to verify the measured depth to groundwater. The depth of groundwater was measured from a reference point marked on the lip of each well casing. A licensed surveyor has surveyed the elevation of each reference point. The result was recorded on the field sampling log for each well. Other relevant information such as physical condition of the well, presence of hydrocarbon odors, etc. was also recorded as appropriate on the field sampling log.

The well sounder used for this project was equipped to measure free product (FP) layers thicker than 0.1 inches. FP was indicated as light non-aqueous phase liquid (LNAPL) or dense non-aqueous phase liquid (DNAPL).

Groundwater purging was conducted immediately following the collection of a groundwater depth measurement from all monitoring wells. Groundwater samples were analyzed for the following constituents:

- Volatile organic compounds (VOCs) using EPA Method 8260B to include all Tentatively Identified Compounds (TICs).
- Total Petroleum Hydrocarbons as gasoline (TPH-gas) using EPA Method 8015 modified.

5.1) Well Purging and Measurement of Field Parameters

Wells were purged in the following order MW-17, MW-9, MW-16, MW-7, MW-12, MW-13, MW-2, MW-15, MW-3, MW-21, MW-18, MW-20, MW-14, MW-11, MW-19, and MW-10 to minimize the potential for cross contamination. The wells were purged by Blaine Tech Services, Inc (Blaine) and sampled by BEII from December 17 through 19, 2002 in the presence of Mr. Sanford Britt of the DTSC. The purge protocol was presented in the Field Sampling Plan as Appendix A in the Groundwater Monitoring Work Plan dated October 23, 2001 and submitted to the DTSC.

Prior to purging, casing volumes was calculated based on total well depth, standing water level, and casing diameter. One casing volume was calculated as:

$$V = \pi(d/2)^2 h \times 7.48$$

where:

V is the volume of one well casing of water (in gallons, 1 ft^3 = 7.48 gallon);
d is the inner diameter of the well casing (in feet); and
h is the total depth of water in the well - the depth to water level (in feet).

A minimum of three casing volumes of water was purged from each well. Water was collected into a measured bucket to record the purge volume. All purged groundwater was containerized in 55-gallon hazardous waste drum for disposal at a later date.

After each well casing volume was purged; water temperature, pH, specific conductance (EC), and turbidity were measured using field test meters and the measurements were recorded on Well Monitoring Data Sheets (See Appendix A). Samples were collected after these parameters have stabilized; indicating that representative formation water has entered the well. The temperature, pH, and specific conductance should not vary by more than 10 percent from reading to reading. Turbidity should be less then 5 NTUs, however, the purging process stirred up silty material in each well which made the turbidity measurements of 5 NTUs unattainable. Groundwater samples were collected after water levels recharged to 80 percent of the static water column. Notations of water quality including color, clarity, odors, sediment, etc. were also noted in the data sheets.

All field meters were calibrated according to manufacturers' guidelines and specifications before and after each day of field use. Field meter probes were decontaminated before and after use at each well. The pH, conductivity, and temperature were measured with a Myron-L Ultra Meter and turbidity was measured with a HF Scientific DRT-15C meter. The calibration standards used for pH were 4 and 7 with expiration dates of July 2003. Conductivity was calibrated to a 3900 µs standard with an expiration date of July 2003. A 0.02 NTU standard was used to calibrate the turbidity with an expiration date of July 2003.

5.2) Well Sampling

Groundwater samples were collected by lowering a separate disposable bailer into each well. Groundwater was transferred from the bailer directly into the appropriate sample containers with preservative, if required, chilled, and processed for shipment to the laboratory. When transferring samples, care was taken not to touch the bailer-emptying device to the sample containers. Water samples were transported to Southland Technical Services, Inc., a certified laboratory by the California Department of Health Services (Cert. #1986) to perform the requested analysis.

Groundwater samples were collected from monitoring wells MW-17, MW-9, MW-16, MW-7, MW-12, MW-13, MW-2, MW-15, MW-3, MW-21, MW-18, MW-20, MW-14, MW-11, MW-19, and MW-10 only. Monitoring wells MW-4, MW-6, and MW-8 identified FP as LNAPL at a thickness of 0.04', 0.14' and 0.81', respectively. The FP thickness in MW-6 is assumed based on the depth of the well bottom since no water was identified in the well.

Vials for VOC and TPH analysis were filled first to minimize aeration of groundwater collected in the bailer. The laboratory provided vials containing sufficient HCl preservative to lower the pH to less than 2. The vials were filled directly from the bottom-emptying device. The vial was capped with a cap containing a Teflon septum. Blind duplicate samples for the laboratory were labeled as "MW-1", "MW-5", and "MW-22" and were collected from monitoring wells MW-9, MW-2, and MW-3, respectively. All vials were inverted and tapped to check for bubbles to insure zero headspace.

New nitrile gloves were worn during by sampling personnel for each well to prevent cross contamination of the samples. A solvent free label was affixed to each sample container/vial denoting the well identification, date and time of sampling, and an identifying code to distinguish each individual bottle.

5.3) Sample Handling

VOA vials, including laboratory trip blanks, were placed inside of one new Ziplock bag per well and stored in a cooler chilled to approximately 4°C with bagged ice. Water samples were logged on the chain-of-custody forms immediately following sampling of each well to insure proper tracking through analysis to the laboratory.

5.4) Waste Management

FP, purged groundwater, and decontamination water were stored in sealed 55-gallon drums for a period not to exceed 90 days. Stored wastes will be profiled for hazardous constituents and characterized as Non-Hazardous, California Hazardous, or RCRA Hazardous, as appropriate. Any transportation of waste will be under appropriate manifest.

6.0) FREE PRODUCT

Monitoring wells MW-4, MW-6, and MW-8 identified FP as LNAPL at a thickness of 0.04-feet, 0.14-feet, and 0.81-feet, respectively. A total of 1.5 gallons of FP was recovered from MW-6 and 8.5 gallons of FP was recovered from MW-8 to date. Monitoring well MW-4 contained such a small amount of fluid within the well that a bailer was unable to retrieve any liquid.

Laboratory analysis of the FP was performed in June 2002 and identified dissolved TPH-gas at 812,000 mg/L from MW-6 and 801,000 mg/L from MW-8. Concentrations of dissolved TPH as diesel were also identified in FP as 53,400 mg/L from MW-6 and 56,600 mg/L from MW-8. No detectable concentrations of TPH as motor oil were identified in FP collected from both wells. Previous laboratory analysis of FP collected from monitoring well MW-6 identified 1,1,1-TCA at 28,100 mg/L, 1,2,4-Trimethylbenzene at 22,100 mg/L, Xylenes at 10,370 mg/L, Toluene at 9,010 mg/L, 1,3,5-Trimethylbenzene at 5,400 mg/L, and Ethylbenzene at 4,320 mg/L.

7.0) GROUNDWATER SAMPLE RESULTS

Groundwater samples collected from the shallow zone (Gasper) monitoring wells MW-7, MW-8, MW-9, MW-10, MW-11, MW-12, MW-16, MW-18, and MW-19 in December 2002 contained TPH-gas ranging from 107,000 µg/L in MW-19 to 1,530 µg/L in MW-9. Laboratory results are included as Appendix B. Dissolved TPH-gas concentrations averaged 32,508 µg/L in the shallow Gasper Aquifer. See Table 1 and Figure 5 for dissolved TPH-gas concentrations. Note the legacy of high dissolved TPH-gas concentrations from 41,700 µg/L in MW-18 to 68,300 µg/L in MW-10 to 107,000 µg/L in MW-19.

Groundwater samples collected from the deeper zone (Gage/Hollydale) monitoring wells MW-2, MW-3, MW-13, MW-14, MW-15, MW-17, MW-20, and MW-21 in December 2002 contained TPH-gas ranging from 11,400 µg/L in MW-3 to 61 µg/L in MW-20. The concentrations of dissolved TPH-gas averaged 3,603 µg/L in the deeper Gage/Hollydale Aquifer. See Table 1 and Figure 6 for dissolved TPH-gas concentrations. Dissolved TPH-gas is at maximum concentrations along the southwestern property boundary, which could be attributed to an off-site source since the Gage/Hollydale hydraulic gradient is relatively flat at 0.0058 ft/ft.

Concentrations of dissolved BTEX ranged between <26,270 µg/L in MW-10 to <100.2 µg/L in MW-9 from the shallow Gasper Aquifer (See Figure 5). The less than value includes those concentrations reported as Practical Quantitation Limit (PQL) which is defined as the method detection limit multiplied by the dilution factor. The average dissolved BTEX concentration in the Gasper from the 2002 fourth quarter sampling was <3,164 µg/L. Relatively high dissolved BTEX concentrations were observed in southern upgradient monitoring well MW-18 as 5,455 µg/L.

Dissolved BTEX in the deeper Gage/Hollydale Aquifer ranged between 9,957 µg/L in MW-3 to <4 µg/L in MW-17 (See Figure 6). The 2002 fourth quarter sample episode identified an average dissolved BTEX concentration of <2,035 µg/L in the Gage /Hollydale. The maximum dissolved BTEX concentration was located along the southwest property line in monitoring well MW-3.

Groundwater sample results from the shallow Gasper Aquifer identified relatively high VOC concentrations compared to the low VOC concentrations in the deeper Gage/Hollydale Aquifer (See Table 2 and Appendix B for laboratory results).

Concentrations of dissolved PCE and TCE were identified at a maximum concentration of 1,240 µg/L and 1,740 µg/L, respectively, in the Gasper from MW-19 (See Figure 7). Monitoring well MW-18 is located downgradient of the former chemical storage area of the neighboring McKesson site and upgradient of former ACC chemical storage. Groundwater collected from MW-18 contained dissolved PCE as 534 µg/L and TCE as 946 µg/L. Maximum concentrations of dissolved PCE and TCE in the Gage/Hollydale were detected as 97.1 µg/L and 77.2 µg/L, respectively from groundwater collected MW-13 (See Figure 8). Elevated PCE and TCE concentrations in groundwater were also identified as 53.1 µg/L and 55.7 µg/L, respectively, from MW-21. Dissolved VOC concentrations were detected at higher levels along the south side of the property.

Dissolved concentrations of 1,1,1-TCA were identified in the shallow Gasper Aquifer at a maximum of 21,500 µg/L in MW-19 (See Figure 7). Monitoring well MW-10 located upgradient of MW-19 identified dissolved 1,1,1-TCA as 13,800 µg/L. Groundwater collected from MW-18 located upgradient of MW-19 and MW-10 identified dissolved 1,1,1-TCA as 1,150 µg/L. Lower concentrations of dissolved 1,1,1-TCA were identified in the deeper Gage/Hollydale Aquifer at a maximum of 230 µg/L in MW-14 (See Figure 8). In monitoring wells MW-2 and MW-3 no dissolved 1,1,1-TCA was detected <250 µg/L (relatively high detection limit due to dilution factors).

Groundwater samples were also analyzed for 1,4-Dioxane, a preservative used in 1,1,1-TCA to prolong its shelf life. However, 1,4-Dioxane is more miscible in groundwater than 1,1,1-TCA and will often lead the dissolved 1,1,1-TCA plume. Monitoring well MW-16 identified the maximum detectable concentration of dissolved 1,4-Dioxane at 16,500 µg/L in the Gasper Aquifer. Gasper monitoring wells MW-10 and MW-19 identified dissolved 1,4-Dioxane at <50,000 µg/L due to high dilution factors. The maximum detectable dissolved 1,4-Dioxane concentration in the Gage/Hollydale Aquifer was 176 µg/L in MW-20. Gage/Hollydale monitoring wells MW-2, MW-3, MW-14, MW-15, and MW-21 contained dissolved 1,4-Dioxane concentrations between <5,000 µg/L and <500 µg/L due to high dilution factors.

Concentrations of dissolved chlorinated VOC daughter products were relatively elevated compared to their respective parent VOCs and also showed a trend of higher dissolved concentrations in the shallow Gasper Aquifer compared to the deeper Gage/Hollydale Aquifer.

1,1-DCA is a daughter product from reductive dehalogenation of 1,1,1-TCA and from carbon-carbon double bond reduction of 1,1-DCE, another daughter product. Dissolved 1,1-DCA concentrations were identified between 1,190 µg/L and 42,400 µg/L

in the Gasper Aquifer (See Figure 7). The greatest dissolved 1,1-DCA concentration was observed in MW-10 located in the middle of the site. Upgradient dissolved 1,1-DCA concentrations in the Gasper Aquifer were identified as 4,390 µg/L in MW-18 and 3,930 µg/L in MW-12. Dissolved 1,1-DCA concentrations in the Gage/Hollydale Aquifer ranged between 13 µg/L and 1,920 µg/L (See Figure 8). Monitoring wells MW-2 and MW-3 located along the southwest property boundary contained the highest dissolved 1,1-DCA concentrations in the Gage/Hollydale Aquifer as 1,920 µg/L and 1,190 µg/L, respectively. The next highest dissolved 1,1-DCA concentration was 171 µg/L in MW-14.

Dissolved 1,1-DCE, a daughter product of the dehydrohalogenation of 1,1,1-TCA and reductive dehalogenation of TCE, was identified at concentrations ranging from 154 µg/L to 17,700 µg/L in the Gasper Aquifer (See Figure 7). The maximum dissolved 1,1-DCE concentration was observed in MW-19. The next largest dissolved 1,1-DCE concentration was identified as 6,850 µg/L in groundwater collected from MW-18. Gasper monitoring well MW-18 is located upgradient of former ACC chemical storage including monitoring well MW-19. Dissolved 1,1-DCE concentrations in the Gage/Hollydale Aquifer ranged between 18.6 µg/L and 2,230 µg/L (See Figure 8). Gage/Hollydale monitoring well MW-2 located along the southwest property boundary contained the maximum dissolved 1,1-DCE concentration (2,230 µg/L).

Cis-1,2 DCE is also a daughter product of the dehydrohalogenation of 1,1,1-TCA and reductive dehalogenation of TCE. Concentrations of dissolved cis-1,2-DCE were identified between 180 µg/L and 23,300 µg/L in the Gasper Aquifer (See Figure 7). The greatest dissolved cis-1,2-DCE concentration was observed in MW-10 located in the middle of the site. Upgradient dissolved cis-1,2-DCE concentration in the Gasper Aquifer was identified as 18,100 µg/L in MW-18. Dissolved cis-1,2-DCE concentrations in the Gage/Hollydale Aquifer ranged between 9.3 µg/L and 11,800 µg/L (See Figure 8). Gage/Hollydale monitoring well MW-2 located along the southwest property boundary contained the maximum dissolved 1,1-DCE concentration (11,800 µg/L).

Vinyl chloride (VC) is a by-product from the dehydrohalogenation and reductive dehalogenation of the chlorinated VOC daughter products mentioned above. Unlike the other VOCs, concentrations of dissolved VC were at higher concentrations (up to 3 times) in the deeper Gage/Hollydale than in the shallow Gasper Aquifer. Dissolved VC concentrations were identified between 107 µg/L and 4;100 µg/L in the shallow Gasper Aquifer (See Figure 7). Gasper monitoring well MW-12 located on the south east side of the property is upgradient of former ACC chemical storage and contained elevated VC as 1,100 µg/L. However, dissolved VC concentrations in the Gage/Hollydale ranged from <2 µg/L to 12,700 µg/L (See Figure 8). The maximum dissolved VC concentration was located along the southwest property line in monitoring well MW-3.

Maximum dissolved concentrations of acetone and MEK were identified in Gasper monitoring well MW-19 as 70,000 µg/L and 18,500µg/L, respectively (See

Figure 9). Groundwater collected from MW-18 located upgradient of MW-19 and MW-10 identified dissolved acetone as 26,000 µg/L and dissolved MEK as 9,300 µg/L. No detectable concentrations of acetone or MEK were identified from the 2002 fourth quarter groundwater monitoring episode in the Gage/Hollydale Aquifers (See Figure 10). However, the detection limits were high in some samples (<1,250 µg/L) due to the high dilution factors. Furthermore, no detectable concentrations of dissolved methylene chloride were identified in either the Gasper or the Gage/Hollydale Aquifers. The detection limits for dissolved methylene chloride were high in some samples (<2,500 µg/L) due to the high dilution factors

8.0) CONCLUSIONS

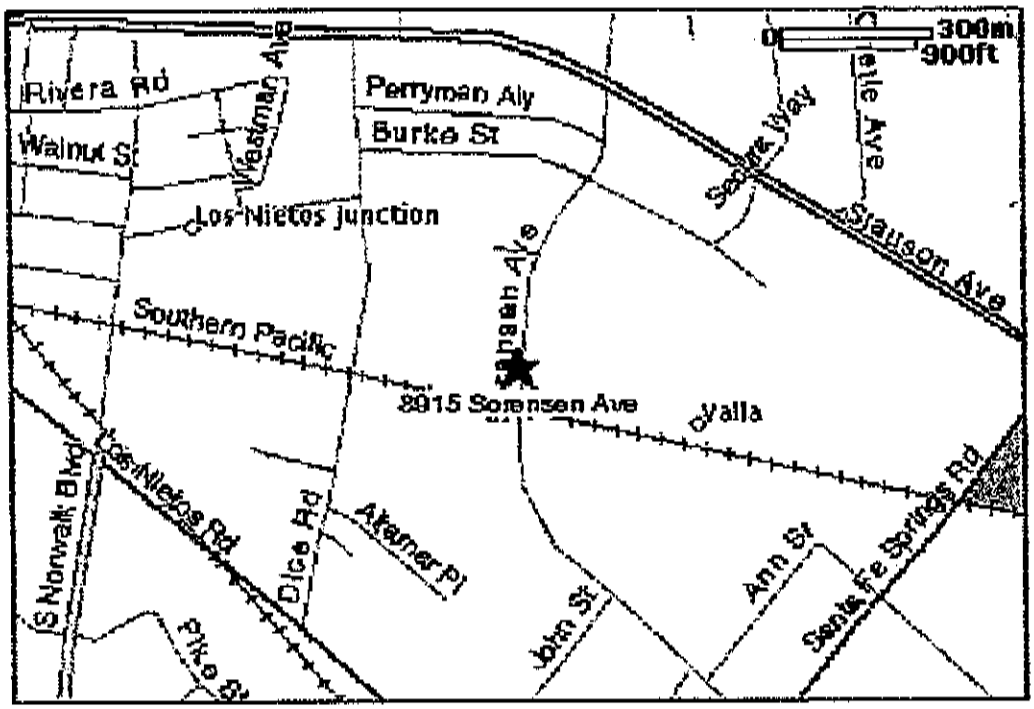
Based on the recent groundwater sample results, BEII concludes that the site is impacted by dissolved VOCs in both the Gasper and Gage/Hollydale Aquifers. Dissolved VOC concentrations, however, were detected at higher concentrations in the Gasper Aquifer compared to the Gage/Hollydale aquifer. Gasper monitoring wells located upgradient of former ACC chemical storage contained elevated VOC concentrations. Gage/Hollydale monitoring wells located along the southern property boundary contained the maximum dissolved VOC concentrations.

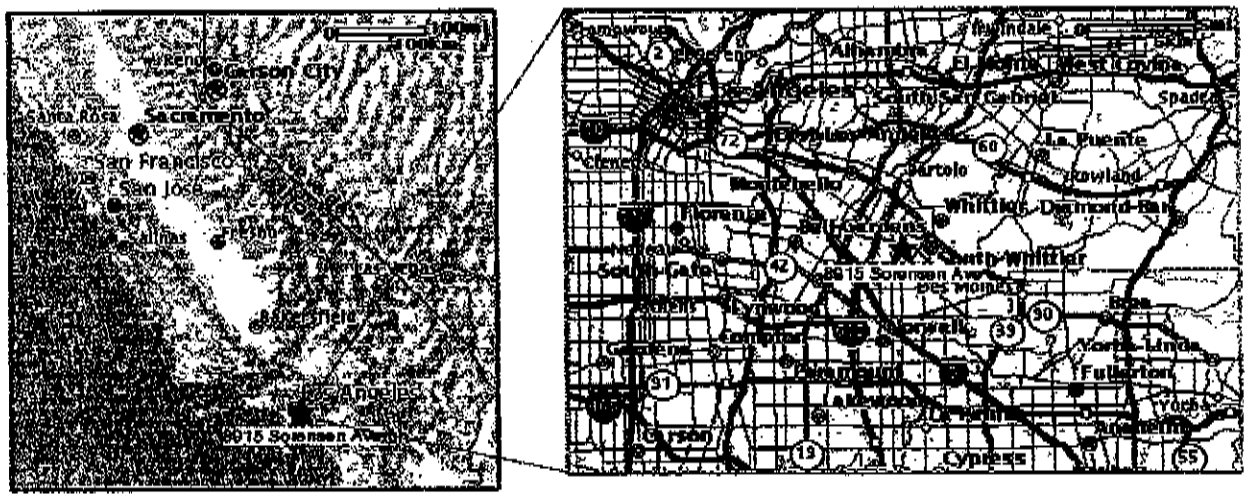
BEII also concludes that the recent groundwater sampling data provides preliminary support that the site has potential for intrinsic biodegradation. Dissolved parent VOC (PCE and TCE) concentrations were identified at concentrations of less than 1,740 µg/L. 1,1,1-TCA was the only parent VOC that was identified at greater than 1,740 µg/L. Daughter VOC constituents such as 1,1-DCA, 1,1-DCE, cis-1,2-DCE, and VC identified dissolved concentrations of up to 42,400 µg/L. However, further groundwater monitoring is needed to determine whether intrinsic biodegradation is occurring.

9.0) RECOMMENDATIONS

BEII recommends that quarterly groundwater monitoring for VOCs and dissolved metals be continued at the former ACC property. BEII further recommends that free product removal be performed on a monthly basis to reduce its mass.

FIGURES



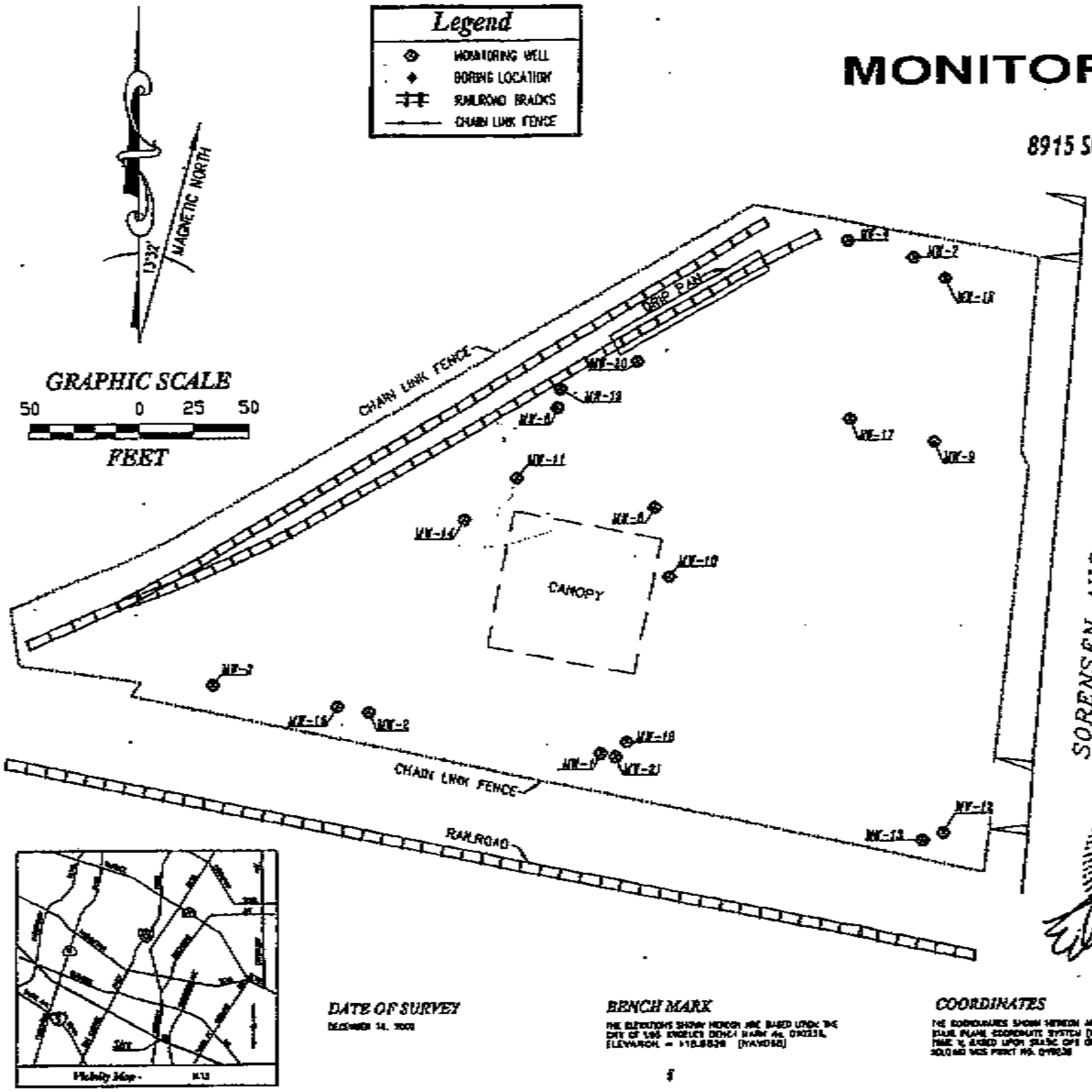


Blakely Environmental Investigations, Inc. **9605 Arrow Route, Suite T** **Rancho Cucamonga, CA**	**Site Location Map** **Former Angeles Chemical Co.** **8915 Sorensen Ave.** **Santa Fe Springs, CA**	**FIGURE** **1**

ANCHEM0119

Figure 2
MONITORING WELL LOCATIONS

FORMER ANGELES CHEMICAL CO.
8915 SORENSEN AVENUE, SANTA FE SPRINGS, CA 90670



MONITORING WELLS						
WELL	NORTH	EAST	TOC (ELEVATION)	TOR (ELEVATION)	PE (ELEVATION)	WE (ELEVATION)
[illegible]	[illegible]	[illegible]			[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
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NOTE
[illegible] ABANDONED

PREPARED FOR
BLAKELY ENVIRONMENTAL INVESTIGATIONS
[illegible]
RANCHO CUCAMONGA, CA [illegible]

LS 4240

DATE OF SURVEY
DECEMBER 14, 2002

BENCH MARK
THE ELEVATIONS SHOWN HEREON ARE BASED UPON THE CITY OF LOS ANGELES BENCH MARK No. [illegible] ELEVATION = [illegible] (NAVD88)

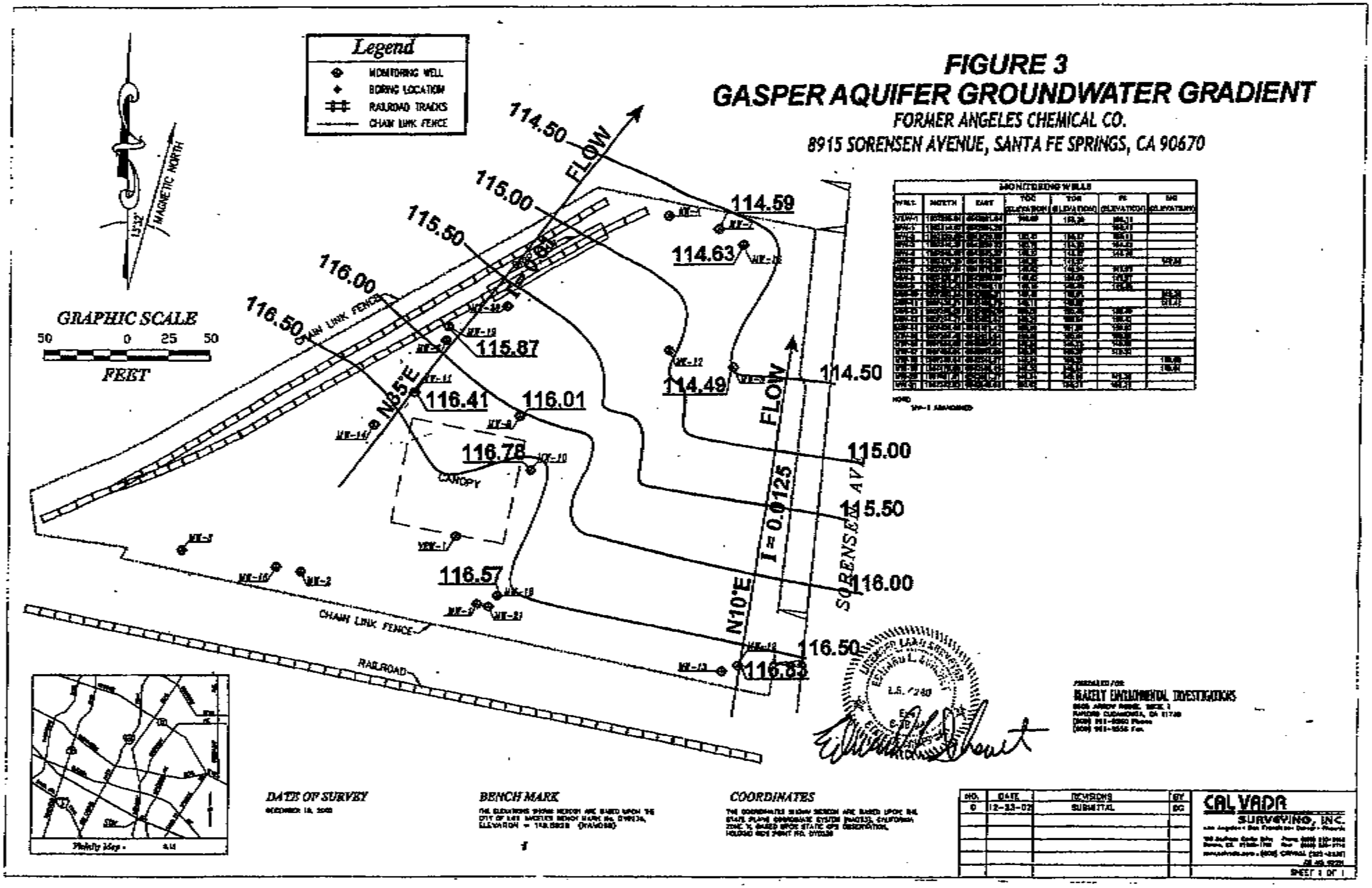
COORDINATES
THE COORDINATES SHOWN HEREON ARE BASED UPON THE STATE PLANE COORDINATE SYSTEM (NAD83), CALIFORNIA ZONE V, BASED UPON STATIC GPS OBSERVATION. [illegible]

NO.	DATE	REVISIONS	BY
0	12-23-02	SUBMITTAL	DG

CALVADA SURVEYING, INC.
[illegible]
SHEET 1 OF 1

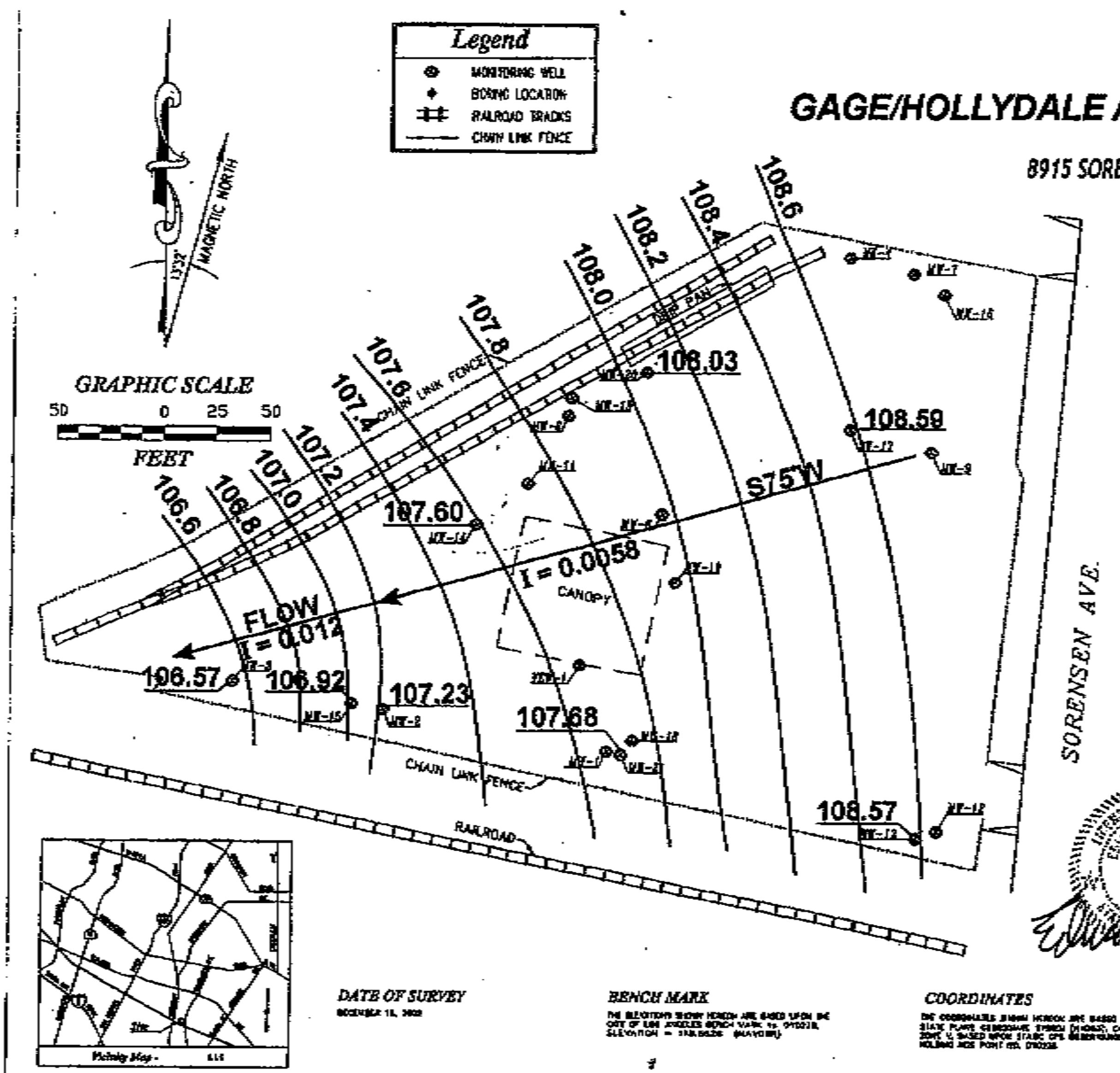
ANCHEM0120

FIGURE 3
GASPER AQUIFER GROUNDWATER GRADIENT
FORMER ANGELES CHEMICAL CO.
8915 SORENSEN AVENUE, SANTA FE SPRINGS, CA 90670



ANCHEM0121

FIGURE 4
GAGE/HOLLYDALE AQUIFER GROUNDWATER GRADIENT
FORMER ANGELES CHEMICAL CO.
8915 SORENSEN AVENUE, SANTA FE SPRINGS, CA 90670



MONITORING WELLS						
WELL	NORTH	EAST	TOC (ELEVATION)	[illegible] (ELEVATION)	[illegible] (ELEVATION)	[illegible] (ELEVATION)
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]			[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]		[illegible]
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
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[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	
[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	[illegible]	

NOTE:
[illegible] ABANDONED

PREPARED FOR
BLAKELY ENVIRONMENTAL INVESTIGATIONS

DATE OF SURVEY

BENCH MARK

COORDINATES

NO.	DATE	REVISIONS	BY
D	12-23-02	SUBMITTAL	DQ

CALVADA SURVEYING, INC.

SHEET 1 OF 1

ANCHEM0122

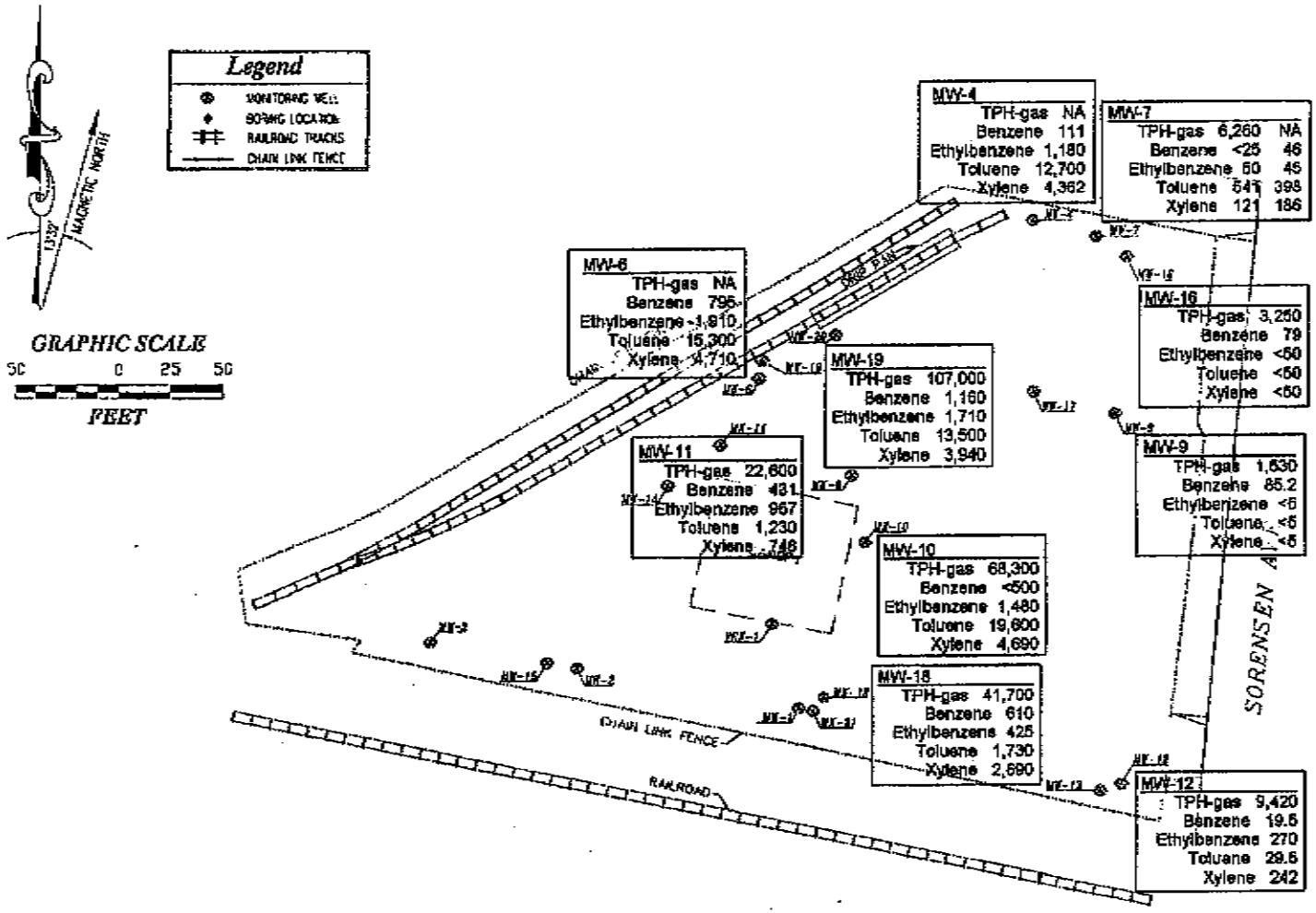

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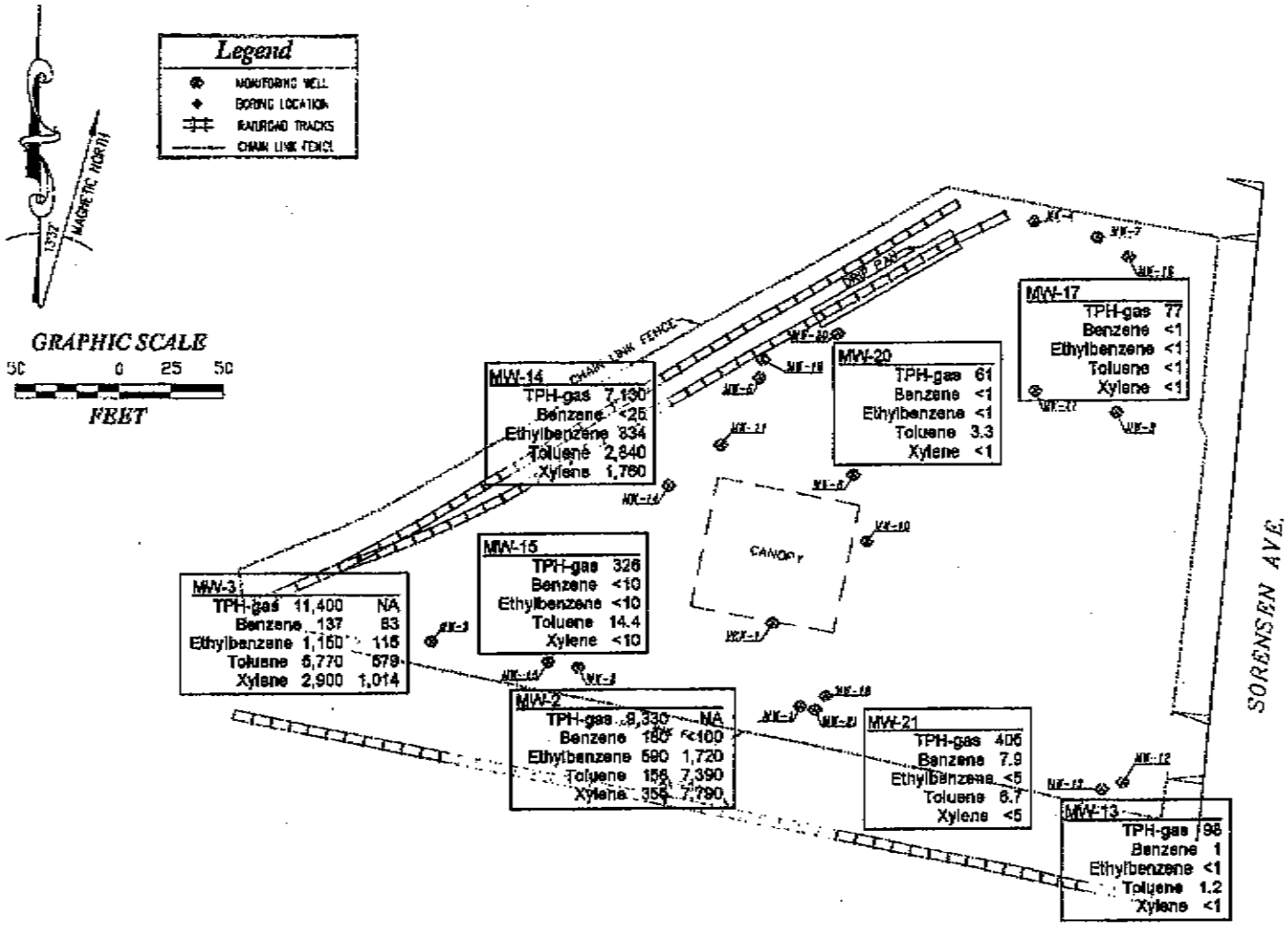
FIGURE 5

TPH-gas and BTEX Concentrations in Gasper Aquifer (µg/L)

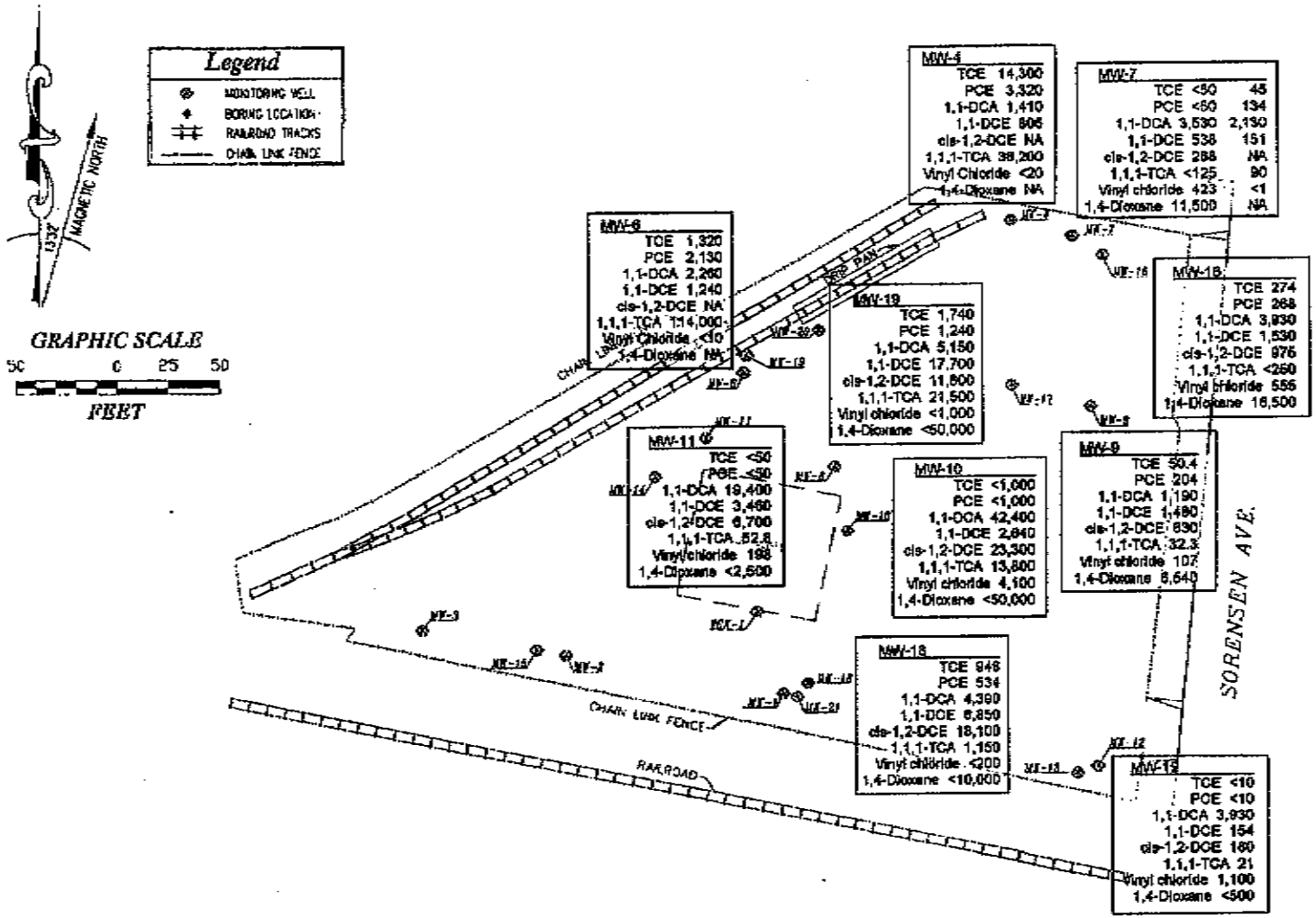
ANCHEM0123



February 1994
December 2002

FIGURE 6
TPH-gas and BTEX Concentrations in Gage/Hollydale Aquifer (µg/L)

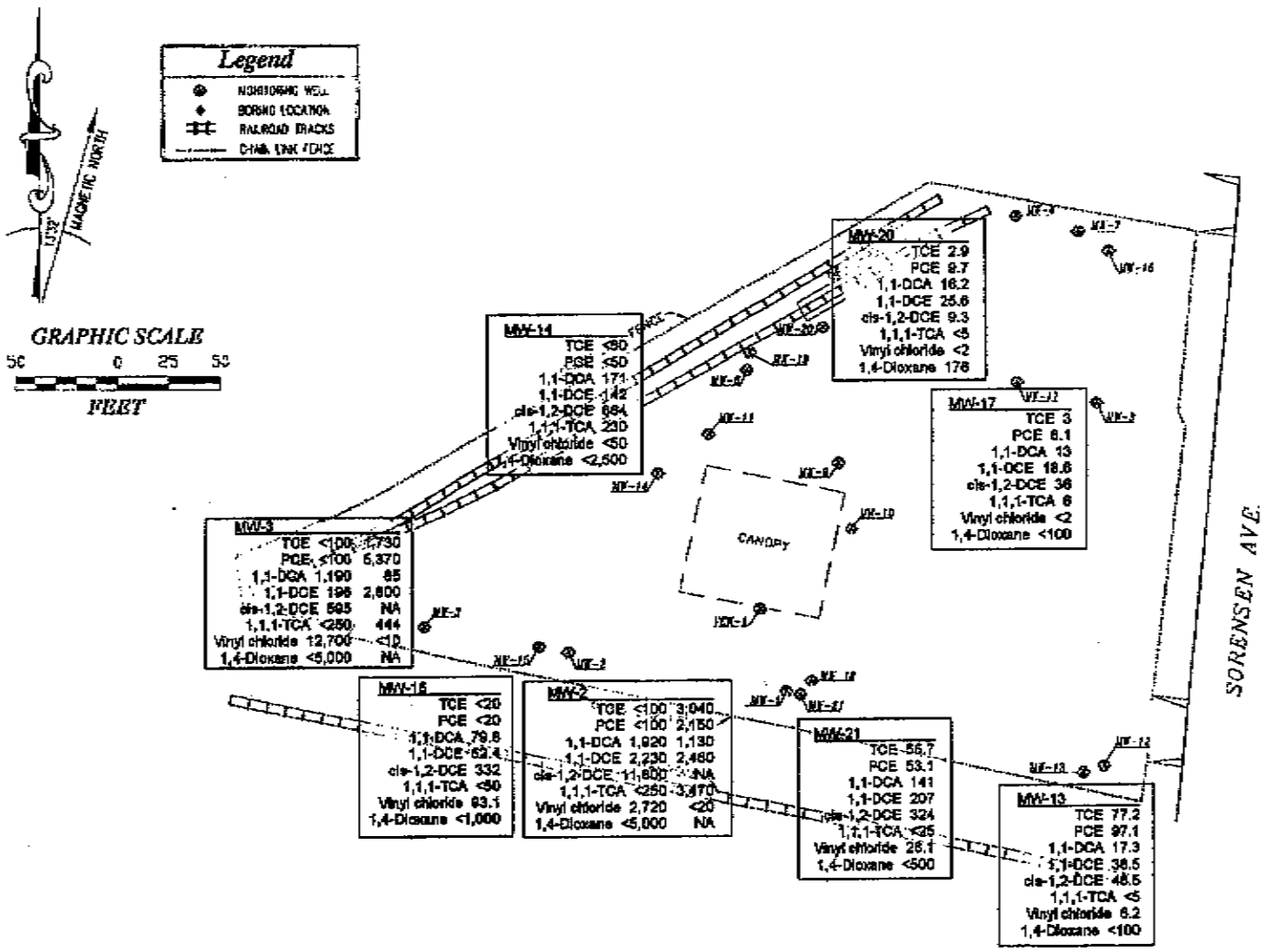
ANCHEM0124



February 1994
December 2002

FIGURE 7
Chlorinated VOC Concentrations in Gasper Aquifer (µg/L)

ANCHEM0125

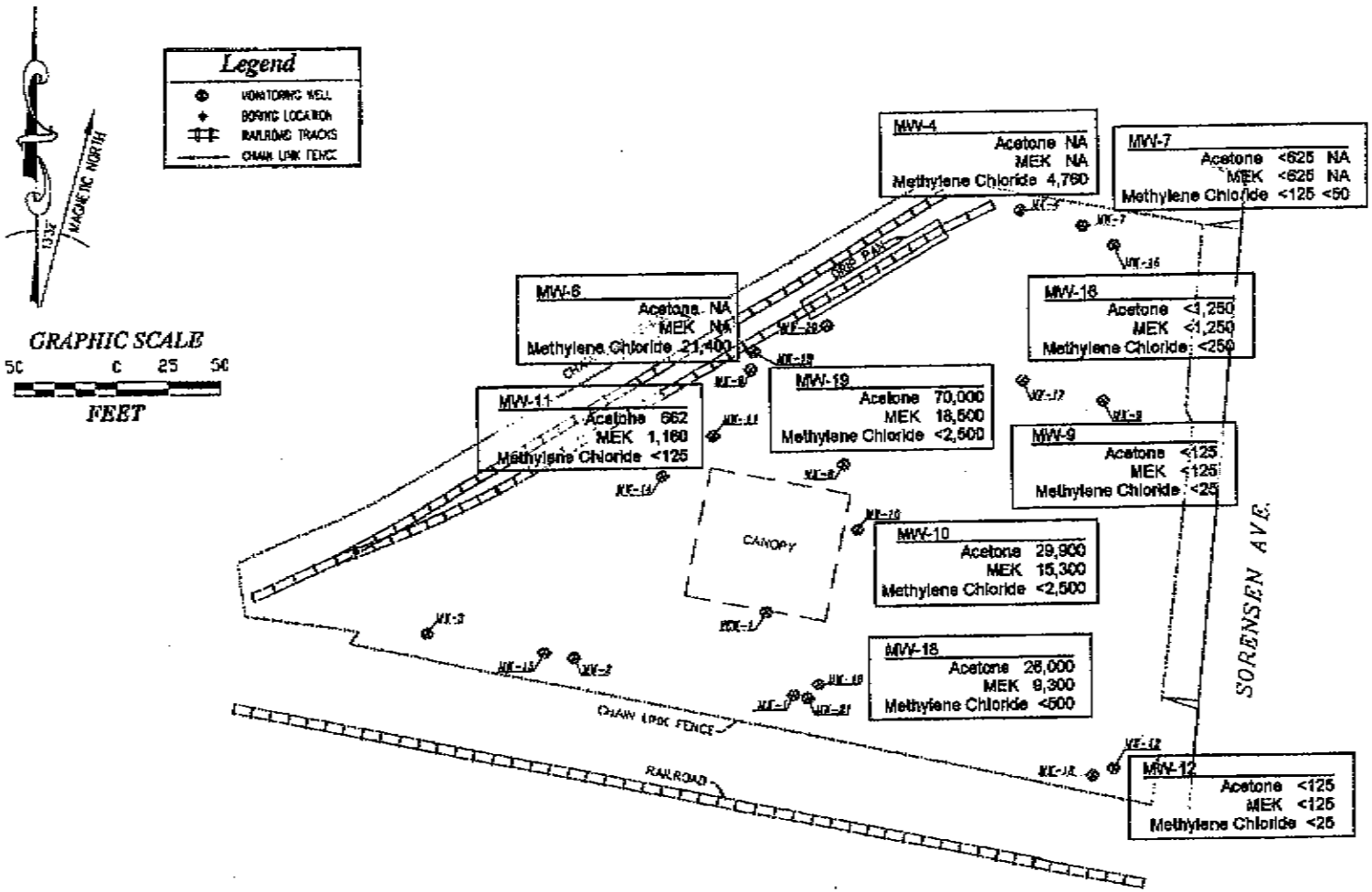


February 1994
December 2002

FIGURE 8

Chlorinated VOC Concentrations in Gage/Hollydale Aquifer (µg/L)

ANCHEM0126

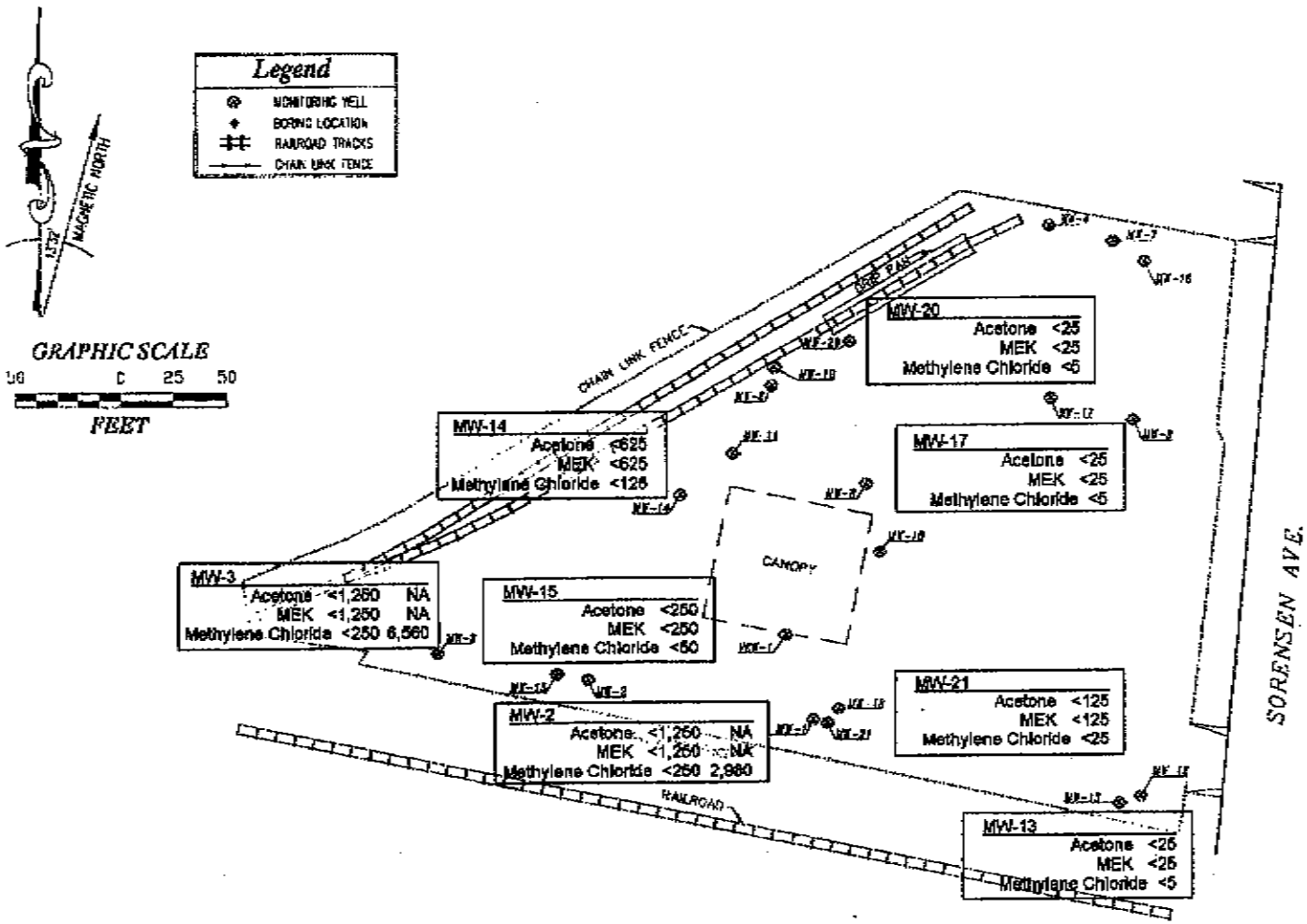


February 1994
December 2002

FIGURE 9

Acetone, MEK and Methylene Chloride Concentrations in Gasper Aqulfer (µg/L)

ANCHEM0127



February 1994
December 2002

FIGURE 10

Acetone, MEK and Methylene Chloride Concentrations in Gage/Hollydale Aquifer (µg/L)

ANCHEM0128

TABLES

Table 1: TPH-gas Groundwater Sample Results using EPA Method 8015 (ug/L)

Screened Interval (bg)	Date	*MW-1 40'-60'	MW-2 30'-50'	MW-3 28'-48'	MW-4 17'-27'	MW-6 20'-30'	MW-7 34'-55'	MW-8 30.5'-40.5'	MW-9 30.5'-45.5'	MW-10 25'-40'	MW-11 30'-40'	MW-12 30'-40'	MW-13 52'-62'	MW-14 55'-65'	MW-15 54'-64'	MW-16 29'-48'	MW-17 56'-66'	MW-18 21'-46'	MW-19 30'-45'	MW-20 57'-67'	MW-21 53'-63'
DTW	Feb-94	30.05'	28.80'	29.70'	23.35'	24.85'	24.53'														
	Nov-00	35.62'	35.28'	36.42'	26.20'	28.52'	28.19'														
	Oct-01	37.41'	37.91'	39.19'	26.35'	NA	28.70'														
	Nov-01	NA	NA	NA	26.35'	28.85'	NA														
	Feb-02	36.2'	36.36'	37.36'	26.44'	30.32'	29.21'														
	Jun-02	37.92'	38.75'	39.19'	26.46'	NA	30.07'	30.91'	30.98'												
	Oct-02	42.45'	43.56'	44.66'	26.46'	30.26'	34.11'	32.58'	34.70'												
	Dec-02	NA	43.19'	44.22'	26.28'	None	34.03'	33.92'	34.67'	32.63'	32.71'	33.26'	41.65'	43.05'	43.63'	33.68'	40.44'	33.05'	33.33'	41.11'	42.34'
TPH-gas	Feb-94	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Nov-00	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oct-01	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Feb-02	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Jun-02	724,000	14,600	22,500	NS-FP	[redacted]	6,530	[redacted]	22,700	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Oct-02	62,300	7,370	28,600	NS-FP	NS-FP	5,300	52,300	1,730	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	Dec-02	NA	9,330	11,400	NS-FP	NS-FP	6,250	NS-FP	1,530	68,300	22,600	9,420	98	7,130	326	3,250	77	41,700	107,000	61	405

NA= Not Analyzed.
NS-FP= Not Sampled Free Product present.
*= Abandoned Well.
[redacted]

ANCHEM01.30

Table 1: Detected VOCs from Groundwater Sample Results using EPA Method 8260 (ug/L)

	Date	MW-1	MW-2	MW-3	MW-4	MW-5	MW-7	MW-8	MW-9	MW-10	MW-11	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	MW-18	MW-19	MW-20	MW-21
Screened Interval (bg)		40-50'	30'-50'	29'-49'	17'-27'	20'-30'	34'-55'	30.5'-40.5'	30.5'-45.5'	25'-40'	30'-40'	30'-40'	52'-62'	55'-65'	54'-64'	29'-44'	56'-66'	21'-46'	30'-45'	57'-67'	53'-63'
DTW	Feb-94	30.05'	26.80'	29.70'	23.85'	24.85'	24.53'														
	Nov-00	35.82'	35.29'	39.42'	26.30'	26.52'	28.19'														
	Oct-01	37.41'	37.91'	39.19'	28.36'	NA	28.70'														
	Nov-01	NA	NA	NA	28.36'	28.85'	NA														
	Feb-02	36.2'	36.39'	37.39'	26.44'	30.32'	29.21'														
	Jun-02	37.92'	38.75'	39.15'	28.46'	NA	30.07'	30.91'	30.95'												
	Oct-02	42.45'	43.86'	44.65'	28.49'	30.28'	34.11'	32.65'	34.70'												
	Dec-02	NA	43.19'	44.22'	28.29'		34.03'	33.62'	34.67'	32.69'	32.71'	33.26'	41.66'	43.08'	43.69'	33.69	40.44'	33.09'	33.33'	41.11'	42.34'
VOCs																					
Acetone	Oct-01	<1,250	<250	<625	NS-MW	<25,000*	1,190														
	Feb-02	<625	<62.5	3,150	NS-FP	NS-FP	748														
	Jun-02	<1,250	<2,500	<625	NS-FP	NS-FP	<125	NS-FP	<500												
	Oct-02	<2,500	<250	<250	NS-FP	NS-FP	<1,250	NS-FP	<125												
	Dec-02	NA	<1,250	<1,250	NS-FP	NS-FP	<625	NS-FP	<125	28,800	862	<125	<25	<625	<250	<1,250	<25	25,000	70,000	<25	<125
Benzene	Feb-94	194	<100	63	111	755	46														
	Nov-00	<2,500	81	73	NS-FP	NS-FP	65														
	Oct-01	128	105	110	NS-MW	110,000*	55														
	Feb-02	231	204	108	NS-FP	NS-FP	83.2														
	Jun-02	300	222	125	NS-FP	NS-FP	<5	NS-FP	90.8												
	Oct-02	245	177	99.2	NS-FP	NS-FP	121	NS-FP	893												
	Dec-02	NA	160	137	NS-FP	NS-FP	<25	NS-FP	85.2	<500	451	19.5	1	<25	<10	79	<1	610	1,160	<1	7.9
2-Butanone (MEK)	Feb-94	NA	NA	NA	NA	NA	NA														
	Nov-00	3,100	<10,000	<10,000	NS-FP	NS-FP	1,400														
	Oct-01	<1,250	<250	600	NS-MW	<25,000*	960														
	Feb-02	<625	<62.5	<500	NS-FP	NS-FP	<50														
	Jun-02	<1,250	<2,500	<625	NS-FP	NS-FP	<125	NS-FP	<500												
	Oct-02	<2,500	<250	<250	NS-FP	NS-FP	<1,250	NS-FP	<125												
	Dec-02	NA	<1,250	<1,250	NS-FP	NS-FP	<625	NS-FP	<125	16,300	1,180	<125	<25	<625	<250	<1,250	<25	9,300	18,500	<25	<125
Chloroethane	Feb-02	<125	119	<100	NS-FP	NS-FP	17														
	Jun-02	<250	<500	<125	NS-FP	NS-FP	<25	NS-FP	<100												
	Oct-02	<500	<50	<50	NS-FP	NS-FP	<250	NS-FP	<25												
	Dec-02	NA	<250	<250	NS-FP	NS-FP	<125	NS-FP	<25	<2,500	<125	<25	<5	<125	<50	<250	<5	<500	<2,500	<5	<25
1,1-Dichloroethane	Feb-94	649	1,130	85	1410	2,260	2,130														
	Nov-00	17,000	1,600	800	NS-FP	NS-FP	2,800														
	Oct-01	5,190	1,320	1,050	NS-MW	592,000*	2,870														
	Feb-02	20,800	2,310	1,360	NS-FP	NS-FP	5,460														
	Jun-02	18,900	2,700	1,340	NS-FP	NS-FP	4,150	NS-FP	1,210												
	Oct-02	10,400	2,560	1,130	NS-FP	NS-FP	5,660	NS-FP	1,390												
	Dec-02	NA	1,920	1,160	NS-FP	NS-FP	3,850	NS-FP	1,150	42,400	18,420	3,930	17.9	171	79.5	3,650	15	4,390	6,160	16.2	141
1,2-Dichloroethane	Feb-94	<100	<100	<50	<100	1140	31														
	Nov-00	<2,500	<500	<500	NS-FP	NS-FP	<500														
	Oct-01	<250	<50	<125	NS-MW	<5,000*	<25														
	Feb-02	<125	<12.5	<100	NS-FP	NS-FP	43.4														
	Jun-02	<250	<500	<125	NS-FP	NS-FP	<25	NS-FP	<100												
	Oct-02	<500	<50	<50	NS-FP	NS-FP	<250	NS-FP	<25												
	Dec-02	NA	<250	<250	NS-FP	NS-FP	<125	NS-FP	<25	<2,500	<125	<25	<5	<125	<50	28	<5	<500	<2,500	<5	<25

DTW= Depth to Water.

ANCHEM01 31

Table 3 (cont.): Detected VOCs from Groundwater Sample Results using EPA Method 8260 (ug/L)

VOCs	Date	MW-1	MW-2	MW-3	MW-4	MW-6	MW-7	MW-8	MW-9	MW-10	MW-11	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	MW-18	MW-19	MW-20	MW-21
1,1-Dichloroethene	Feb-94	2,210	2,490	2,600	806	1,240	151														
	Nov-00	3,000	<500	2,900	NS-FP	NS-FP	350														
	Oct-01	1,200	1,120	4,090	NS-NW	417,000*	355														
	Feb-02	4,050	1,480	3,800	NS-FP	NS-FP	778														
	Jun-02	4,900	2,090	2,880	NS-FP	NS-FP	423	NS-FP	1,540												
	Oct-02	3,800	2,900	176	NS-FP	NS-FP	547	NS-FP	1,820												
	Dec-02	NA	2,230	196	NS-FP	NS-FP	538	NS-FP	1,480	2,840	3,460	154	36.5	142	82.4	1,530	18.8	6,850	17,700	25.6	207
cis 1,2-Dichloroethene	Feb-94	NA	NA	NA	NA	NA	NA														
	Nov-00	20,000	8,800	5,700	NS-FP	NS-FP	210														
	Oct-01	10,900	9,160	7,500	NS-NW	1,080,000*	194														
	Feb-02	29,100	11,100	7,980	NS-FP	NS-FP	269														
	Jun-02	31,100	14,800	6,480	NS-FP	NS-FP	239	NS-FP	612												
	Oct-02	20,700	10,400	212	NS-FP	NS-FP	311	NS-FP	736												
	Dec-02	NA	11,800	595	NS-FP	NS-FP	268	NS-FP	650	23,300	8,700	180	46.5	664	332	975	36	18,100	11,800	9.3	324
trans 1,2-Dichloroethene	Feb-94	NA	NA	NA	NA	NA	NA														
	Nov-00	<2,500	<500	<500	NS-FP	NS-FP	<500														
	Oct-01	<250	<50	<125	NS-NW	<5,000*	<25														
	Feb-02	<125	<12.5	<100	NS-FP	NS-FP	<10														
	Jun-02	<250	<500	<125	NS-FP	NS-FP	<25	NS-FP	<100												
	Oct-02	<500	<50	<50	NS-FP	NS-FP	<250	NS-FP	<25												
	Dec-02	NA	<250	<250	NS-FP	NS-FP	<125	NS-FP	<25	<2,500	<125	<25	<5	<125	<50	<250	<5	<500	<2,500	<5	<25
1,4 Dioxane	Oct-02				NS-FP	NS-FP		NS-FP													
	Dec-02	NA	<5,000	<5,000	NS-FP	NS-FP	11,500	NS-FP	6,540	<50,000	<2,500	<500	<100	<2,500	<1,000	16,500	<100	<10,000	<50,000	176	<500
Ethylbenzene	Feb-94	333	1,720	116	1,160	1,910	45														
	Nov-00	950	120	1,000	NS-FP	NS-FP	82														
	Oct-01	835	197	1,560	NS-NW	4,350,000*	102														
	Feb-02	978	116	1,900	NS-FP	NS-FP	94.4														
	Jun-02	1,480	147	1,470	NS-FP	NS-FP	124	NS-FP	<1												
	Oct-02	864	469	946	NS-FP	NS-FP	213	NS-FP	<1												
	Dec-02	NA	560	1,150	NS-FP	NS-FP	60	NS-FP	<5	1,480	967	270	<1	334	<10	<50	<1	495	1,710	<1	<5
Methylene Chloride	Feb-94	1,220	2,980	6,530	4,750	21,400	<50														
	Nov-00	1,100	180	6,800	NS-FP	NS-FP	150														
	Oct-01	<1,250	<250	<625	NS-NW	<5,000*	<125														
	Feb-02	<250	18.5	3,990	NS-FP	NS-FP	<20														
	Jun-02	<250	<500	<125	NS-FP	NS-FP	<25	NS-FP	<100												
	Oct-02	<500	<50	<50	NS-FP	NS-FP	<250	NS-FP	<25												
	Dec-02	NA	<250	<250	NS-FP	NS-FP	<125	NS-FP	<25	<2,500	<125	<25	<5	<125	<50	<250	<5	<500	<2,500	<5	<25
4-Methyl-2-pentanone	Oct-01	<1,250	<250	4,130	NS-NW	<25,000*	625														
	Feb-02	<625	<62.5	3,470	NS-FP	NS-FP	378														
	Jun-02	<1,250	<2,500	2,850	NS-FP	NS-FP	388	NS-FP	<500												
	Oct-02	<2,500	<250	1,410	NS-FP	NS-FP	276	NS-FP	<125												
	Dec-02	NA	<1,250	<1,250	NS-FP	NS-FP	<625	NS-FP	<125	<12,500	3,540	<125	<25	<625	<250	<1,250	<25	<2,500	<12,500	<25	<125
Naphthalene	Oct-01	195	75	<125	NS-NW	1,660,000*	85														
	Feb-02	195	64	122	NS-FP	NS-FP	74.8														
	Jun-02	<250	58.4	178	NS-FP	NS-FP	116	NS-FP	<100												
	Oct-02	<500	62.2	58.2	NS-FP	NS-FP	<250	NS-FP	<25												
	Dec-02	NA	<250	<250	NS-FP	NS-FP	<125	NS-FP	<25	<2,500	<125	97	<5	<125	<50	<250	<5	<500	<2,500	<5	<25
n-Propylbenzene	Jun-02	<250	58.8	<125	NS-FP	NS-FP	<25	NS-FP	<100												
	Oct-02	<500	44.2	<50	NS-FP	NS-FP	<250	NS-FP	<25												
	Dec-02	NA	<250	<250	NS-FP	NS-FP	<125	NS-FP	<25	<2,500	259	89.5	<5	<125	<50	<250	<5	<500	<2,500	<5	<25

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Table 2 (cont.): Detected VOCs from Groundwater Sample Results using EPA Method 8260 (ug/L)

VOCs	Date	MW-1*	MW-2	MW-3	MW-4	MW-6	MW-7	MW-8	MW-9	MW-10	MW-11	MW-12	MW-13	MW-14	MW-15	MW-16	MW-17	MW-18	MW-19	MW-20	MW-21
Tetrachloroethene	Feb-94	862	2,150	5,370	4,320	2,130	134														
	Nov-00	<2,500	<500	130	NS-FP	NS-FP	<500														
	Oct-01	<100	<20	150	NS-NW	531,000*	100														
	Feb-02	20	3.3	302	NS-FP	NS-FP	6.2														
	Jun-02	24.8	<500	133	NS-FP	NS-FP	<25	NS-FP	122												
	Oct-02	<300	<20	39.3	NS-FP	NS-FP	<100	NS-FP	190												
	Dec-02	NA	<100	<100	NS-FP	NS-FP	<50	NS-FP	204	<1,000	<50	<10	97.1	<50	<20	269	8.1	534	1,240	9.7	53.1
1,1,1-Trichloroethane	Feb-94	9,370	3,470	444	36,200	114,000	80														
	Nov-00	<2,500	<500	70	NS-FP	NS-FP	<500														
	Oct-01	<250	<50	<125	NS-NW	26,100,000*	<25														
	Feb-02	<125	<12.5	<100	NS-FP	NS-FP	<10														
	Jun-02	<250	<500	<125	NS-FP	NS-FP	<25	NS-FP	<100												
	Oct-02	<500	<50	<50	NS-FP	NS-FP	<250	NS-FP	92												
	Dec-02	NA	<250	<250	NS-FP	NS-FP	<125	NS-FP	32.9	13,800	52.6	21	<5	230	<50	<250	5	1,150	21,500	<5	<25
Trichloroethene	Feb-94	7,160	5,040	1,730	14,900	1,220	45														
	Nov-00	<2,500	<500	1,600	NS-FP	NS-FP	<500														
	Oct-01	<100	<20	100	NS-NW	753,000*	<10														
	Feb-02	20	2.5	250	NS-FP	NS-FP	5.5														
	Jun-02	<250	<500	154	NS-FP	NS-FP	<25	NS-FP	<100												
	Oct-02	<200	<20	28	NS-FP	NS-FP	<100	NS-FP	58.6												
	Dec-02	NA	<100	<100	NS-FP	NS-FP	<50	NS-FP	60.4	<1,000	<50	<10	77.2	<50	<20	274	5	945	1,740	2.9	55.7
1,2,4-Trimethylbenzene	Oct-01	1,890	18.8	345	NS-NW	22,100,000*	200														
	Feb-02	2,800	231	668	NS-FP	NS-FP	234														
	Jun-02	3,850	<500	616	NS-FP	NS-FP	238	NS-FP	<100												
	Oct-02	2,120	116	299	NS-FP	NS-FP	327	NS-FP	<25												
	Dec-02	NA	282	958	NS-FP	NS-FP	<125	NS-FP	<25	<2,500	2,120	1,840	<5	270	<50	<250	<5	1,585	2,500	<5	<25
1,3,5-Trimethylbenzene	Oct-01	470	62.9	145	NS-NW	5,400,000*	25														
	Feb-02	995	67.8	126	NS-FP	NS-FP	45.6														
	Jun-02	1,170	57.6	<125	NS-FP	NS-FP	<25	NS-FP	<100												
	Oct-02	874	87.8	87.8	NS-FP	NS-FP	<250	NS-FP	<25												
	Dec-02	NA	<250	<250	NS-FP	NS-FP	<125	NS-FP	<25	<2,500	875	755	<5	106	<50	<250	<5	628	<2,500	<5	<25
Toluene	Feb-94	690	7,360	578	12,700	16,500	398														
	Nov-00	4,000	87	3,700	NS-FP	NS-FP	800														
	Oct-01	3,470	26	6,150	NS-NW	9,010,000*	975														
	Feb-02	4,860	28.2	4,830	NS-FP	NS-FP	1,330														
	Jun-02	6,150	102	4,750	NS-FP	NS-FP	1,280	NS-FP	<20												
	Oct-02	5,300	39	4,510	NS-FP	NS-FP	2,560	NS-FP	<5												
	Dec-02	NA	159	6,770	NS-FP	NS-FP	841	NS-FP	<5	18,900	1,230	295	1.2	2,840	14.4	<50	<1	1,750	13,500	3.3	6.7
Vinyl Chloride	Oct-01	1,260	75	<5	NS-NW	<5,000*	186														
	Feb-02	1,260	197	698	NS-FP	NS-FP	817														
	Jun-02	<100	<500	<50	NS-FP	NS-FP	<10	NS-FP	<40												
	Oct-02	2,660	2,710	12,200	NS-FP	NS-FP	564	NS-FP	123												
	Dec-02	NA	2,720	12,700	NS-FP	NS-FP	423	NS-FP	107	4,100	195	1,100	6.2	<50	93.1	555	<2	<200	<1,000	<2	26.1
Xylenes	Feb-94	2,192	7,790	1,014	4,562	4,710	166														
	Nov-00	3,400	<500	2,500	NS-FP	NS-FP	247														
	Oct-01	2,770	<2	3,730	NS-NW	10,370,000*	301														
	Feb-02	3,750	14.8	3,070	NS-FP	NS-FP	290														
	Jun-02	5,240	152	3,990	NS-FP	NS-FP	354	NS-FP	<20												
	Oct-02	3,510	73	2,570	NS-FP	NS-FP	576	NS-FP	<5												
	Dec-02	NA	355	2,900	NS-FP	NS-FP	121	NS-FP	<5	4,890	748	242	<1	1,760	<10	<50	<1	2,890	9,940	<1	<5

NA= Not Analyzed.
NS-FP= Not Sampled Free Product present.
NS-NW= Not Sampled Not Enough Water present.
*= Abandoned Well.

* = Analysis of Free Product.
Sites= Chemicals stored on-site.
Rad= Transformation compounds.

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APPENDICES

A

WELL GAUGING DATA

Project # 021217-DB1 Date 12/17/02 Client Blakely Env. Investigations

Site Angeles Chemical Co.

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
MW-7	2					40.44	66.35	TOC	
MW-9	4					34.67	45.60		
MW-10	2					33.69	45.35		
MW-11	2					34.03	51.70		
MW-12	2					33.26	46.02 ~~51.87~~		
MW-13	2					41.65	62.39		
MW-14	4					43.19	51.88		
MW-15	2					43.63	64.45		
MW-16	4					44.22	51.78		
MW-17	2					42.34	62.94		
MW-18	2					33.06	44.06		
MW-20	2					41.11	67.61		
MW-21	2					43.06	65.05		
MW-22	2					32.71	39.81		
MW-23	2					33.33	46.18		
MW-24	4					32.63	40.50		
MW-25	4		26.24	0.04		26.28	—	↓	

WELL GAUGING DATA

Project # 021217-DB1 Date 12/17/02 Client Blakely Env. Investigations

Site: Angeles Chemical Co.

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOC	
MW-6	4		30.14			—	30.28	TOC ↓	
MW-8	4		32.81			33.62	—		

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (408) 573-0555

WELL MONITORING DATA SHEET

Project #: 021217-DB1	Client: Blakely Env
Sampler: DB	Start Date: 12/17/02
Well I.D.: MW-2	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 51.66	Depth to Water: 43.19 80% recharge = 44.92
Before: After:	Before: 43.19 After: 47.31
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

Purge Method:
- Bailer
- Disposable Bailer
- Middleburg
- Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other 2" Red. Elo

Sampling Method: Bailer
- (Disposable Bailer)
- Extraction Port
- Dedicated Tubing
- Other: ___

started purging @ 1403 @ 1/2 GPM

5.7 (Gals.) X 3 = 17.1 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp. (°F or °C)	pH	Conductivity (mS or µS)	Turbidity (NTU)	Gals. Removed	Observations
1416	72.0	6.54	2047	187	6	slowed pump to 1/4 GPM odor
—	well	dewatered @		11	gal	
0746	~~66.6~~	~~6.80~~	~~2000~~	Began purging @ 1/2	~~gal~~	~~GPM~~ .
0748	68.6	6.80	2000	97	12	odor
0802	68.4	6.83	2011	77	18	OTW = 43.51

Did well dewater? (Yes) No — Gallons actually evacuated: 18

Sampling Time: 1401 — Sampling Date: 12/18/02

Sample I.D.: MW-2 — Laboratory: STL

Analyzed for: (TPH-G) BTEX MTBE TPH-D — Other: VOC's

Equipment Blank I.D.: @ Time — Duplicate I.D.: MW-5 ANCHEM0138

Analyzed for: (TPH-G) BTEX MTBE TPH-D — Other: VOC's

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
ORP (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 021217-DB1	Client: Blakely Env Investigations
Sampler: DB	Start Date: 12/19/02
Well I.D.: MW-3	Well Diameter: 2 3 (4) 6 8
Total Well Depth: 51.78	Depth to Water: 44.22 80% Recharge = 45.7
Before: After:	Before: 44.22 After: 50.81
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

Purge Method:

Bailer
Disposable Bailer
Middleburg
Electric Submersible
Waterra
Peristaltic
Extraction Pump
(Other 2" Redi-Flo)

Sampling Method: Bailer
(Disposable Bailer)
Extraction Port
Dedicated Tubing
Other: _____

started purging @ 0913 @ ½ GPM

5.0 (Gals.) X 3 = 15.0 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
0923	70.1	6.81	1955	12	5	odor
0943	72.0	6.79	2000	4	10	slowed pump to ¼ GPM
—	well	dewatered @		13 gal		
1424	started purging @		¼ GPM			
1432	72.8	6.82	2065	7	15	odor

12/19/02 1315 DTW = 44.4

Did well dewater? (Yes) No	Gallons actually evacuated: 15			
Sampling Time: 1319	Sampling Date: 12/19/02			
Sample I.D.: MW-3	Laboratory: STL			
Analyzed for: (TPH-G) BTEX MTBE TPH-D	Other: VOC's			
Equipment Blank I.D.: @ Time	Duplicate I.D.: MW-22	ANCHEM0139		
Analyzed for: (TPH-G) BTEX MTBE TPH-D	Other: VOC's			
D.O. (if req'd): Pre-purge:	mg/L	Post-purge:	mg/L	
ORP (if req'd): Pre-purge:	mV	Post-purge:	mV	

WELL MONITORING DATA SHEET

Project #: 021217-DB1	Client: Blakely Env
Sampler: DB	Start Date: TZ/1616 12/17/02
Well I.D.: MW-7	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 51.70	Depth to Water: 34.03 80% recharge = 37.56
Before: After:	Before: 34.03 After: 50.13
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

Purge Method:

Bailer	Waterra	
Disposable Bailer	Peristaltic	
Middleburg	Extraction Pump	
Electric Submersible	(Other 2" Red. Glo)	

Sampling Method: Bailer

(Disposable Bailer)

Extraction Port

Dedicated Tubing

Other: _____

Started purging @ 1156 @ 15PM

2.9 (Gals.) X 3 = 8.7 Gals.

1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp. (°F or °C)	pH	Conductivity (mS or µS)	Turbidity (NTU)	Gals. Removed	Observations
1202	69.1	6.81	2775	2256	3	odor black
1205	70.3	6.61	2806	73	6	odor black
—	well	dewatered		@ 7 gal		
1452	69.4	6.75	2710	71000	9	Began purging @ 1450 hr, 1457 hr
						DTW = 37.55

Did well dewater? (Yes) No Gallons actually evacuated: 9

Sampling Time: 1506 Sampling Date: 12/17/02

Sample I.D.: MW-7 Laboratory: STL

Analyzed for: (TPH-G) BTEX MTBE TPH-D Other: VOC's

Equipment Blank I.D.: @ Time Duplicate I.D.: ANCHEM0140

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
ORP (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 021217-DB1	Client: Blakely Env. Investigations
Sampler: DB	Start Date: 12/17/02
Well I.D.: MW-9	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 45.60	Depth to Water: 80% DTW = 36.48
Before: After:	Before: 34.67 After: 42.35
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

Purge Method:
- Bailer
- Disposable Bailer
- Middleburg
- Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- Other 2" Bennett

Sampling Method: Bailer
- Disposable Bailer
- Extraction Port
- Dedicated Tubing
- Other: _____

Began purging @ 2GPM @ 1040

7.2 (Gals.) X 3 = 21.6 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp. (°F or °C)	pH	Conductivity (mS or µS)	Turbidity (NTU)	Gals. Removed	Observations
1047	68.2	6.77	2225	11	8	
1048	70.1	6.61	2312	54	15	slowed pump to 1 GPM
1055	70.4	6.58	2331	34	22	
						DTW = 35.72

Did well dewater? Yes (No) Gallons actually evacuated: 22

Sampling Time: ~~1506~~ 1520 Sampling Date: 12/17/02

Sample I.D.: MW-9 Laboratory: STL

Analyzed for: ~~TPH-G~~ BTEX MTBE TPH-D Other: VOC's

Equipment Blank I.D.: @ Time Duplicate I.D.: MW-1 ANCHEM0141

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
ORP (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 021217-081	Client: Blaikely Env Investigations
Sampler: DB	Start Date: 12/17/02
Well I.D.: MW-10	Well Diameter: 2 3 (4) 6 8 ___
Total Well Depth: 40.50	Depth to Water: 32.63 80% Recharge = 34.20
Before: After:	Before: 32.63 After: 39.49
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

Purge Method:

Bailer
Disposable Bailer
Middleburg
Electric Submersible
Waterra
Peristaltic
Extraction Pump
(Other 2" Red. Elo)

Sampling Method: Bailer
(Disposable Bailer)
Extraction Port
Dedicated Tubing
Other: _____

Started pump @ 1004 @ 1/2 GPM

5.2 (Gals.) X 3 = 15.6 Gals.
1 Case Volume Specified Volumes Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp. (°F or °C)	pH	Conductivity (mS or µS)	Turbidity (NTU)	Gals. Removed	Observations
1027	69.1	6.84	3854	23	6	Started pump to 1/4 GPM
1047	74.5	6.81	3687	5	11	
1106	75.1	6.82	3671	9	16	
~~1141~~	~~Began purging @ 1/8 GPM~~					
~~1418~~						DTW = 34.17

Did well dewater? Yes (No) Gallons actually evacuated: 16

Sampling Time: 1418 Sampling Date: 12/19/02

Sample I.D.: MW-10 Laboratory: STL

Analyzed for: (TPH-G) BTEX MTBE TPH-D Other: VOC's

Equipment Blank I.D.: @ Time Duplicate I.D.:

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

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D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
ORP (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 02.12.17-DB1	Client: Blakely Env Investigations
Sampler: DB	Start Date: 12/17/02
Well I.D.: MW-11	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 39.81	Depth to Water: 32.71 40% recharge = 39.13
Before: After:	Before: 32.71 After: 33.09
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

Purge Method:

Bailer	Waterra	
Disposable Bailer	Peristaltic	
Middleburg	Extraction Pump	
Electric Submersible	(Other 2" Rad. Flo)	

Sampling Method: Bailer
(Disposable Bailer)
Extraction Port
Dedicated Tubing
Other: _____

Started purging @ 0814 @ 1/4 GPM

1.2 (Gals.) X 3 = 3.6 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp. (°F or °C)	pH	Conductivity (mS or µS)	Turbidity (NTU)	Gals. Removed	Observations
0822	66.5	6.98	2509	28	2	
0826	71.1	6.95	2641	18	3	
0830	71.7	6.87	2686	14	4	
						OTW = 32.98

Did well dewater? Yes (No)		Gallons actually evacuated: 4	
Sampling Time: 0841		Sampling Date: 12/19/02	
Sample I.D.: MW-11		Laboratory: STL	
Analyzed for: (TPH-G) BTEX MTBE TPH-D		Other: VOC's	
Equipment Blank I.D.: @ Time		Duplicate I.D.: ANCHEM0143	
Analyzed for: TPH-G BTEX MTBE TPH-D		Other:	
D.O. (if req'd): Pre-purge:	mg/L	Post-purge:	mg/L
ORP (if req'd): Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 021217-081	Client: Blaksley Env Investigations
Sampler: OB	Start Date: 12/17/02
Well I.D.: MW-12	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 46.02	Depth to Water: 33.26 60% recharge = 35.73
Before: After:	Before: 33.26 After: 33.63
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

Purge Method:

Bailer	Waterra	
Disposable Bailer	Peristaltic	
Middleburg	Extraction Pump	
Electric Submersible	(Other 2" Bennett)	

Sampling Method: Bailer

(Disposable Bailer)	
Extraction Port	
Dedicated Tubing	
Other: ____	

Started purging @ 1233 @ 1 GPM

2.1 (Gals.) X 3 = 6.3 Gals.
1 Case Volume Specified Volumes Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp. (°F or °C)	pH	Conductivity (mS or µS)	Turbidity (NTU)	Gals. Removed	Observations
1236	70.6	6.98	1572	389	3	
1238	72.3	7.00	1565	111	5	
1240	72.8	7.02	1572	46	7	
						DTW = 33.73

Did well dewater? Yes (No) Gallons actually evacuated: 7

Sampling Time: 1254 Sampling Date: 12/17/02

Sample I.D.: MW-12 Laboratory: STL

Analyzed for: (TPH-G) BTEX MTBE TPH-D Other: VOCs

Equipment Blank I.D.: @ Time Duplicate I.D.: ANCHEM0144

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
ORP (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 021217-DB1	Client: Blakely Env Investigations
Sampler: DB	Start Date: 12/17/02
Well I.D.: MW-13	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 62.39	Depth to Water: 41.65 80% DTW = 45.79
Before: After:	Before: 41.65 After: 43.79
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

Purge Method:

Bailer
Disposable Bailer
Middleburg
Electric Submersible
Waterra
Peristaltic
Extraction Pump
(Other 2" Redi-Flo)

Sampling Method: Bailer
(Disposable Bailer)
Extraction Port
Dedicated Tubing
Other: _____

Began Purging @ 1322 @ 1GPM

3.4 (Gals.) X 3 = 10.2 Gals.
1 Case Volume Specified Volumes Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp. (°F or °C)	pH	Conductivity (mS or µS)	Turbidity (NTU)	Gals. Removed	Observations
1326	70.2	6.96	1759	>1000	4	
1329	71.0	6.98	1747	>1000	8	
1332	71.3	6.97	1374	522	11	
						DTW = 41.65

Did well dewater? Yes (No) Gallons actually evacuated: 11

Sampling Time: 1345 Sampling Date: 12/17/02

Sample I.D.: MW-13 Laboratory: STL

Analyzed for: (TPH-G) BTEX MTBE TPH-D Other: VOC's

Equipment Blank I.D.: @ Time Duplicate I.D.: ANCHEM0145

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
ORP (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 021217-DB1	Client: Blakely Env Investigations
Sampler: DB	Start Date: 12/17/02
Well I.D.: MW-14	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 65.05	Depth to Water: 43.06 80% Recharge = 47.45
Before: After:	Before: 43.06 After: 44.01
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

Purge Method:

Bailer	Waterra	
Disposable Bailer	Peristaltic	
Middleburg	Extraction Pump	
Electric Submersible	(Other 2" Red. Flo)	

Sampling Method: Bailer

(Disposable Bailer)	
Extraction Port	
Dedicated Tubing	
Other: ___	

started purging @ 1307

3.6 (Gals.) X 3 = 10.8 Gals.

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.16

Time	Temp. (°F or °C)	pH	Conductivity (mS or µS)	Turbidity (NTU)	Gals. Removed	Observations
1315	72.9	6.67	1839	275	4	
1323	73.3	6.79	1849	89	8	
1328	72.7	6.83	1866	26	11	
						DTW=43.10

Did well dewater? Yes (No) Gallons actually evacuated: 11

Sampling Time: 1342 Sampling Date: 12/18/02

Sample I.D.: MW-14 Laboratory: STL

Analyzed for: (TPH-G) BTEX MTBE TPH-D Other: VOC's

Equipment Blank I.D.: @ Time Duplicate I.D.: ANCHEM0146

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
ORP (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 021217-081	Client: Blakely Env. Investigations
Sampler: DB	Start Date: 12/17/02
Well I.D.: MW-1S	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 64.45	Depth to Water: 43.63 80% recharge = 47.79
Before: After:	Before: 43.63 After: 48.51
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

Purge Method:

- Bailer
- Disposable Bailer
- Middleburg
- Electric Submersible
- Waterra
- Peristaltic
- ~~Extraction Pump~~
- (Other 2" Red. Bb)

Sampling Method: Bailer

- (Disposable Bailer)
- Extraction Port
- Dedicated Tubing
- Other: ____

Started purging @ 0821 @ 1 GPM

3.4 (Gals.) X 3 = 13.2 Gals.

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp. (°F or °C)	pH	Conductivity (mS or µS)	Turbidity (NTU)	Gals. Removed	Observations
0828	69.8	6.99	1829	>1000	4	slowed pump to ½ GPM
0836	70.7	6.91	1823	311	8	
0842	70.8	6.93	1821	59	11	
						DTW = 43.91

Did well dewater? Yes (No) Gallons actually evacuated: 11

Sampling Time: 0852 Sampling Date: 12/18/02

Sample I.D.: MW-1S Laboratory: STL

Analyzed for: (TPH-G) BTEX MTBE TPH-D Other: VOC's

Equipment Blank I.D.: @ Time Duplicate I.D.: ANCHEM0147

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
ORP (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 021217-0B1	Client: Blakely Env. Investigations
Sampler: OB	Start Date: 12/17/02
Well I.D.: MW-16	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 45.35	Depth to Water: 80% DTW = 36.02
Before: After:	Before: 33.69 After: 35.25
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

Purge Method:

Bailer
Disposable Bailer
Middleburg
Electric Submersible
Waterra
Peristaltic
Extraction Pump
(Other 2" Redi-flo)

Sampling Method: Bailer
(Disposable Bailer)
Extraction Port
Dedicated Tubing
Other: _____

Started purging @ 1116 @ ~~1/4~~ 1/2 GPM

1.9 (Gals.) X 3 = 5.7 Gals.
1 Case Volume Specified Volumes Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp. (°F or °C)	pH	Conductivity (mS or µS)	Turbidity (NTU)	Gals. Removed	Observations
1120	71.4	6.60	2107	433	2	
1124	71.9	6.56	2117	92	4	
1128	71.8	~~6.56~~ 6.5	2106	18	6	
						DTW = 33.98

Did well dewater? Yes (No) Gallons actually evacuated: 6

Sampling Time: 1136 Sampling Date: 12/17/02

Sample I.D.: MW-16 Laboratory:

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

Equipment Blank I.D.: @ Time Duplicate I.D.: ANCHEM0148

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
ORP (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 021217-DB1	Client: Blaikley Env Investigations Angeles Chemical
Sampler: DB	Start Date: 12/17/02
Well I.D.: MW-17	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 66.35	Depth to Water: 40.44 40% DTW = 45.62
Before: After:	Before: 40.44 After: 46.22
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

Purge Method:

- Bailer
- Disposable Bailer
- Middleburg
- Electric Submersible
- Waterra
- Peristaltic
- Extraction Pump
- (Other 2" Redi-Flo)

Sampling Method:

- Bailer
- ~~Disposable Bailer~~
- Extraction Port
- Dedicated Tubing
- Other: _____

Began purging @ 0950 @ 1GPM

4.3 (Gals.) X 3 = 12.9 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp. (°F or °C)	pH	Conductivity (mS or µS)	Turbidity (NTU)	Gals. Removed	Observations
0955	69.2	7.10	1867	616	5	slowed pump to 0.5 GPM
1003	71.6	6.95	1879	57	9	
1011	72.2	6.93	1885	16	13	
						OTW = 42.13

Did well dewater? Yes (No)		Gallons actually evacuated: 13	
Sampling Time: 1025		Sampling Date: 12/17/02	
Sample I.D.: MW-17		Laboratory: STL	
Analyzed for: (TPH-G) BTEX MTBE TPH-D		Other: VOC's	
Equipment Blank I.D.: @ Time		Duplicate I.D.: ANCHEM0149	
Analyzed for: TPH-G BTEX MTBE TPH-D		Other:	
D.O. (if req'd):	Pre-purge: mg/L	Post-purge:	mg/L
ORP (if req'd):	Pre-purge: mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 021217-081	Client: Blakely Env. Investigations
Sampler: DB	Start Date: 12/17/02
Well I.D.: MW-18	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 44.06	Depth to Water: 88 recharge = 35.26
Before: After:	Before: 33.06 After: 43.01
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

Purge Method:
Bailer
Disposable Bailer
Middleburg
Electric Submersible
Waterra
Peristaltic
Extraction Pump
Other 2" Redi-flo

Sampling Method: Bailer
(Disposable Bailer)
Extraction Port
Dedicated Tubing
Other: ____

Started pump @ 1110 @ 1/2 GPM

1.6 (Gals.) X 3 = 5.4 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp. (°F or °C)	pH	Conductivity (mS or µS)	Turbidity (NTU)	Gals. Removed	Observations
1115	67.2	6.64	2513	331	2	
—	well	dewatered	@ 3 gal			
1456	Began purging @ 1/4 GPM					
1500	70.7	6.72	2513	239	4	
1508	70.3	6.68	2515	211	6	DTW @ Time of sample 39.49

Did well dewater? (Yes) No
Gallons actually evacuated: 6

Sampling Time: 1449
Sampling Date: 12/19/02

Sample I.D.: MW-18
Laboratory: STL

Analyzed for: (TPH-G) BTEX MTBE TPH-D Other: VOCs

Equipment Blank I.D.: @ Time
Duplicate I.D.: ANCHEM0150

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
ORP (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 021217-DB1	Client: Blakely Env Investigations
Sampler: DB	Start Date: 12/17/02
Well I.D.: MW-19	Well Diameter: (2) 3 4 6 8 ____
Total Well Depth: 46.18	Depth to Water: 40% Recharge 35.90
Before: After:	Before: 33.33 After:
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

Purge Method:

Bailer
Disposable Bailer
Middleburg
Electric Submersible
Waterra
Peristaltic
Extraction Pump
(Other 2" Redi-Flo)

Sampling Method: Bailer
(Disposable Bailer)
Extraction Port
Dedicated Tubing
Other: _____

slowed purging @ 0900 @ 1/4 GPM

2.1 (Gals.) X 3 = 6.3 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp. (°F or °C)	pH	Conductivity (mS or µS)	Turbidity (NTU)	Gals. Removed	Observations
0901	71.5	6.98	5911	226	3	
0927	71.9	7.01	5901	135	5	Slowed pump to 1/8 GPM
well	dewatered	@	6 gal			DTW = 45.10
1141	Began	purging	@ 1/8 GPM			
1148	72.8	7.02	5977	211	7	DTW @ Time of sample 41.17

Did well dewater? (Yes) No — Gallons actually evacuated: 7

Sampling Time: 1436 — Sampling Date: 12/19/02

Sample I.D.: MW-19 — Laboratory: STL

Analyzed for: (TPH-G) BTEX MTBE TPH-D — Other: VOC's

Equipment Blank I.D.: @ Time — Duplicate I.D.: ANCHEM0151

Analyzed for: TPH-G BTEX MTBE TPH-D — Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
ORP (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 021217-DB1	Client: Blakely Env Investigations
Sampler: DB	Start Date: 12/17/02
Well I.D.: MW-20	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 67.61	Depth to Water: 41.11 adj DTW = 46.41
Before: After:	Before: 41.11 After: 44.98
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

Purge Method:

Bailer
Disposable Bailer
Middleburg
Electric Submersible
Waterra
Peristaltic
Extraction Pump
Other ~~2" Redi-Flo~~

Sampling Method: Bailer
(Disposable Bailer)
Extraction Port
Dedicated Tubing
Other: ___

Started purging @ 1210 @ ½ GPM

4.4 (Gals.) X 3 = 13.2 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1220	71.3	7.09	1949	360	5	
1230	71.9	7.00	1905	84	10	
1237	71.6	6.99	1907	25	14	
						DTW = 42.10

Did well dewater? Yes (No) Gallons actually evacuated: 14

Sampling Time: 1245 Sampling Date: 12/18/02

Sample I.D.: MW-20 Laboratory: STL

Analyzed for: (TPH-G) BTEX MTBE TPH-D Other: VOC's

Equipment Blank I.D.: @ Time Duplicate I.D.: ANCHEM0152

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
ORP (if req'd):	Pre-purge:	mV	Post-purge:	mV

WELL MONITORING DATA SHEET

Project #: 021217-DB1	Client: Blakely Env Investigations
Sampler: DB	Start Date: 12/17/02
Well I.D.: MW-21	Well Diameter: (2) 3 4 6 8 ___
Total Well Depth: 62.94	Depth to Water: 80% DTW = 46.46
Before: After:	Before: 42.34 After: 48.73
Depth to Free Product:	Thickness of Free Product (feet):
Referenced to: (PVC) Grade	D.O. Meter (if req'd): YSI HACH

Purge Method:

Bailer
Disposable Bailer
Middleburg
Electric Submersible
Waterra
Peristaltic
Extraction Pump
(Other "2" Redi-Flo)

Sampling Method: Bailer
(Disposable Bailer)
Extraction Port
Dedicated Tubing
Other: ___

Started purging @ 1016 @ 1 1/2 GPM

3.4 (Gals.) X 3 = 10.2 Gals.
1 Case Volume | Specified Volumes | Calculated Volume

Well Diameter	Multiplier	Well Diameter	Multiplier
1"	0.04	4"	0.65
2"	0.16	6"	1.47
3"	0.37	Other	radius² * 0.163

Time	Temp (°F)	pH	Cond.	Turbidity	Gals. Removed	Observations
1024	67.4	7.15	1766	365	4	slowed pump to 1/2 GPM
1032	70.1	6.89	1773	300	8	
1038	70.2	7.02	1770	31	11	
1044	70.4	6.99	1746	23	14	
						DTW = 43.11

Did well dewater? Yes (No) Gallons actually evacuated: 14

Sampling Time: 1053 Sampling Date: 12/18/02

Sample I.D.: MW-21 Laboratory: STL

Analyzed for: (TPH-G) BTEX MTBE TPH-D Other: VOC's

Equipment Blank I.D.: @ Time Duplicate I.D.: ANCHEM0153

Analyzed for: TPH-G BTEX MTBE TPH-D Other:

D.O. (if req'd):	Pre-purge:	mg/L	Post-purge:	mg/L
ORP (if req'd):	Pre-purge:	mV	Post-purge:	mV

B

Recycled Stock # Blakley-6-S

abs Co. 1-800-322-3022

ANCHEM0154

SOUTHLAND TECHNICAL SERVICES, INC.

CHAIN OF CUSTODY RECORD

Lab Job Number BL212127

Client: BEI I

Address: 9605 Arrow Route, Suite T Rancho Cucamonga, CA

Report Attention | Phone: (909)989-9550 | Fax: (909)989-9556 | Sampled by:

Project Name/No. | Project Site: Angeles Chemical Co.

Client Sample ID	Lab Sample ID	Sample Collect Date	Sample Collect Time	Matrix Type	Sample Preserve	No.,type* & size of container	602/8021 (BTEX,MTBE)	8015M (Gasoline)	8015M (Diesel)	8260B (VOCs)	8260B (Oxygenates, BTEX)	8260B (MTBE Confirm.)
MW-16	BL212127-6	12/17/02		Water	HCl	2-V		X		X		
MW-17	-7	"		"	"	"		X		X		
MW-12	-4	"		"	"	"		X		X		
MW-13	-5	"		"	"	"		X		X		
MW-7	-2	"		"	"	"		X		X		
MW-9	-3	"		"	"	"		X		X		
MW-1	-1	"		"	"	"				X		
Trip Blank	-8	"		"	"	1-V		X		X		

Analyses Requested

T.A.T. Requested
☐ Rush 8 12 24 hours
☐ 2-3 days ☒ Normal

Sample Condition
☒ Chilled ☒ Intact
☐ Sample seals

Remarks

ANCHEM0155

Relinquished by	Company	Date	Time	Received by	Company
Juan Garcia	BEI I	12/17/02	15:46		SIS
Relinquished by	Company	Date	Time	Received by	Company

Container types: M=Metal Tube, A=Air Bag, P=Plastic bottle, G=Glass bottle, V=VOA vial

Southland Tech. Services, Inc.
7801 Telegraph Road, Suite L & K
Montebello, CA 90640
Tel: (323) 888-0728
Fax: (323) 888-1509

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.
Distribution: WHITE with report, PINK to courier.

Southland Technical Services, Inc.
Environmental Laboratories

01-03-2003

Mr. Hiram Garcia
Blakely Environmental Investigations, Inc.
9605 Arrow Highway, Suite T
Rancho Cucamonga, CA 91730

Project: Angeles Chemical Co.
Project Site: 8915 Sorensen Ave., Santa Fe Springs, CA
Sample Date: 12-17-2002
Lab Job No.: BL212127

Dear Mr. Garcia:

Enclosed please find the analytical report for the sample(s) received by STS Environmental Laboratories on 12-17-2002 and analyzed for the following parameters:

EPA 8015M (Gasoline)
EPA 8260B (VOC's by GC/MS)

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions (i.e., chilled, intact) and with a chain of custody record attached.

STS Environmental Laboratory is certified by CA DHS (Certificate Number 1986). Thank you for giving us the opportunity to serve you. Please feel free to call me at (323) 888-0728 if our laboratory can be of further service to you.

Sincerely,

Roger Wang, Ph. D.
Laboratory Director

Enclosures

This cover letter is an integral part of this analytical report.

ANCHEM0156

7801 Telegraph Road Suite L, Montebello, CA 90640 Phone: (323) 888-0728 Fax: (323) 888-1509

Southland Technical Services, Inc.
Environmental Laboratories

01-03-2003

Client:	Blakely Environmental Investigations, Inc.	Lab Job No.:	BL212127
Project:	Angeles Chemical Co.		
Project Site:	8915 Sorensen Ave., Santa Fe Springs, CA	Date Sampled:	12-17-2002
Matrix:	Water	Date Received:	12-17-2002
Batch No.:	AL18-GW1	Date Analyzed:	12-18-2002

EPA 8015M (Gasoline)
Reporting Units: µg/L (ppb)

Sample ID	Lab ID	Gasoline (C4-C12)	Method Detection Limit	PQL
Method Blank		ND	50	50
MW-7	BL212127-2	6,260	50	500
MW-9	BL212127-3	1, 530	50	500
MW-12	BL212127-4	9,420	50	500
MW-13	BL212127-5	98	50	50
MW-16	BL212127-6	3,250	50	50
MW-17	BL212127-7	77	50	50
TRIP BLANK	BL212127-8	ND	50	50

ND: Not Detected (at the specified limit)

PQL: Practical Quantitation Limit.

ANCHEM0157

7801 Telegraph Road Suite L, Montebello, CA 90640 Phone: (323) 888-0728 Fax: (323) 888-1509

Southland Technical Services, Inc.

Environmental Laboratories

Client: Blakely Environmental Investigations, Inc. Lab Job No.: BL212127 Date Reported: 01-03-2003
Project:Angeles Chemical Co. Matrix: Water Date Sampled: 12-17-2002

EPA 8260B (VOCs by GC/MS, Page 1 of 2) Reporting Unit: ppb

DATE ANALYZED			12-19	12-19-02	12-19-02	12-19-02	12-19-02	12-19-02	12-19-02
DILUTION FACTOR				5	25	5	5	1	50
LAB SAMPLE I.D.				BL212127-1	BL212127-2	BL212127-3	BL212127-4	BL212127-5	BL212127-6
CLIENT SAMPLE I.D.				MW-1	MW-7	MW-9	MW-12	MW-13	MW-16
COMPOUND	MDL	PQL	MB						
Dichlorodifluoromethane	5	5	ND	ND	ND	ND	ND	ND	ND
Chloromethane	5	5	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	2	2	ND	107	423	107	1,100	6.2	553
Bromomethane	5	5	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5	5	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5	5	ND	ND	ND	ND	ND	14.4	ND
1,1-Dichloroethene	5	5	ND	1,490	538	1,480	154	38.5	1,530
Iodomethane	5	5	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	5	5	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	5	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	5	ND	1,290	3,530	1,190	3,930	17.3	3,930
2,2-Dichloropropane	5	5	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	5	ND	638	268	630	180	46.5	975
Bromochloromethane	5	5	ND	ND	ND	ND	ND	ND	ND
Chloroform	5	5	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	5	5	ND	ND	ND	ND	ND	ND	28
1,1,1-Trichloroethane	5	5	ND	33.2	ND	32.3	21	ND	ND
Carbon tetrachloride	5	5	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	5	5	ND	ND	ND	ND	ND	ND	ND
Benzene	1	1	ND	85.5	ND	85.2	19.5	1.0	79.0
Trichloroethene	2	2	ND	46.7	ND	50.4	ND	77.2	274
1,2-Dichloropropane	5	5	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	5	5	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	5	5	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	5	5	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	5	5	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	5	5	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	5	5	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	5	5	ND	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	5	5	ND	ND	ND	ND	ND	ND	ND
Bromoform	5	5	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5	5	ND	ND	ND	ND	89.5	ND	ND
Bromobenzene	5	5	ND	ND	ND	ND	ND	ND	ND

ANCHEM0158

Southland Technical Services, Inc.
Environmental Laboratories

Client: Blakely Environmental Investigations, Inc. Lab Job No.: BL212127 Date Reported: 01-03-2003
Project:Angeles Chemical Co. Matrix: Water Date Sampled: 12-17-2002

EPA 8260B (VOCs by GC/MS, Page 2 of 2) Reporting Unit: (ppb)

COMPOUND	MDL	PQL	MB	MW-1	MW-7	MW-9	MW-12	MW-13	MW-16
Toluene	1	1	ND	ND	541	ND	29.5	1.2	ND
Tetrachloroethene	2	2	ND	180	ND	204	ND	97.1	268
1,2-Dibromoethane(EDB)	5	5	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	5	ND	ND	ND	ND	ND	ND	25
1,1,1,2-Tetrachloroethan	5	5	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1	1	ND	ND	50	ND	270	ND	ND
Total Xylenes	1	1	ND	ND	121	ND	242	ND	ND
Styrene	5	5	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethan	5	5	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	5	5	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	5	5	ND	ND	ND	ND	89.5	ND	ND
2-Chlorotoluene	5	5	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	5	5	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	5	ND	ND	ND	ND	765	ND	ND
tert-Butylbenzene	5	5	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	5	5	ND	ND	ND	ND	1,640	ND	ND
Sec-Butylbenzene	5	5	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5	5	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	5	5	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	5	5	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5	5	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	5	5	ND	ND	ND	ND	46.5	ND	ND
1,2,4-Trichlorobenzene	5	5	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	5	5	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	5	5	ND	ND	ND	ND	ND	ND	ND
Naphthalene	5	5	ND	ND	ND	ND	97	ND	ND
1,2,3-Trichlorobenzene	5	5	ND	ND	ND	ND	ND	ND	ND
Acetone	25	25	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	25	25	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	25	25	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	25	25	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	25	25	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	25	25	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane	50	100	ND	8,350	11,500	6,540	ND	ND	16,500
MTBE	2	2	ND	ND	ND	ND	ND	ND	ND
ETBE	2	2	ND	ND	ND	ND	ND	ND	ND
DIPE	2	2	ND	ND	ND	ND	ND	ND	ND
TAME	2	2	ND	ND	ND	ND	ND	ND	ND
T-Butyl Alcohol	10	10	ND	ND	ND	ND	ND	ND	ND

MDL=Method Detection Limit; MB=Method Blank; ND=Not Detected (below DF × MDL).

ANCHEM0159

Southland Technical Services, Inc.

Environmental Laboratories

Client: Blakely Environmental Investigations, Inc.
Project:Angeles Chemical Co.

Lab Job No.: BL212127
Matrix: Water

Date Reported: 01-03-2003
Date Sampled: 12-17-2002

EPA 8260B (VOCs by GC/MS, Page 1 of 2) Reporting Unit: ppb

DATE ANALYZED			12-19	12-19-02	12-19-02				
DILUTION FACTOR				1	1				
LAB SAMPLE I.D.				BL212127-7	BL212127-8				
CLIENT SAMPLE I.D.				MW-17	Trip Blank				
COMPOUND	MDL	PQL	MB						
Dichlorodifluoromethane	5	5	ND	ND	ND				
Chloromethane	5	5	ND	ND	ND				
Vinyl Chloride	2	2	ND	ND	ND				
Bromomethane	5	5	ND	ND	ND				
Chloroethane	5	5	ND	ND	ND				
Trichlorofluoromethane	5	5	ND	ND	ND				
1,1-Dichloroethene	5	5	ND	18.6	ND				
Iodomethane	5	5	ND	ND	ND				
Methylene Chloride	5	5	ND	ND	ND				
trans-1,2-Dichloroethene	5	5	ND	ND	ND				
1,1-Dichloroethane	5	5	ND	13.0	ND				
2,2-Dichloropropane	5	5	ND	ND	ND				
cis-1,2-Dichloroethene	5	5	ND	36.0	ND				
Bromochloromethane	5	5	ND	ND	ND				
Chloroform	5	5	ND	ND	ND				
1,2-Dichloroethane	5	5	ND	ND	ND				
1,1,1-Trichloroethane	5	5	ND	6.0	ND				
Carbon tetrachloride	5	5	ND	ND	ND				
1,1-Dichloropropene	5	5	ND	ND	ND				
Benzene	1	1	ND	ND	ND				
Trichloroethene	2	2	ND	3.0	ND				
1,2-Dichloropropane	5	5	ND	ND	ND				
Bromodichloromethane	5	5	ND	ND	ND				
Dibromomethane	5	5	ND	ND	ND				
trans-1,3-Dichloropropene	5	5	ND	ND	ND				
cis-1,3-Dichloropropene	5	5	ND	ND	ND				
1,1,2-Trichloroethane	5	5	ND	ND	ND				
1,3-Dichloropropane	5	5	ND	ND	ND				
Dibromochloromethane	5	5	ND	ND	ND				
2-Chloroethylvinyl ether	5	5	ND	ND	ND				
Bromoform	5	5	ND	ND	ND				
Isopropylbenzene	5	5	ND	ND	ND				
Bromobenzene	5	5	ND	ND	ND				

ANCHEM0160

7801 Telegraph Road Suite L, Montebello, CA 90640 Phone: (323) 888-0728 Fax: (323) 888-1509

Southland Technical Services, Inc.

Environmental Laboratories

Client: Blakely Environmental Investigations, Inc. Lab Job No.: BL212127 Date Reported: 01-03-2003
Project:Angeles Chemical Co. Matrix: Water Date Sampled: 12-17-2002

EPA 8260B (VOCs by GC/MS, Page 2 of 2) Reporting Unit: (ppb)

COMPOUND	MDL	PQL	MB	MW-17	Trip Blank				
Toluene	1	1	ND	ND	ND				
Tetrachloroethene	2	2	ND	8.1	ND				
1,2-Dibromoethane(EDB)	5	5	ND	ND	ND				
Chlorobenzene	5	5	ND	ND	ND				
1,1,1,2-Tetrachloroethan	5	5	ND	ND	ND				
Ethylbenzene	1	1	ND	ND	ND				
Total Xylenes	1	1	ND	ND	ND				
Styrene	5	5	ND	ND	ND				
1,1,2,2-Tetrachloroethan	5	5	ND	ND	ND				
1,2,3-Trichloropropane	5	5	ND	ND	ND				
n-Propylbenzene	5	5	ND	ND	ND				
2-Chlorotoluene	5	5	ND	ND	ND				
4-Chlorotoluene	5	5	ND	ND	ND				
1,3,5-Trimethylbenzene	5	5	ND	ND	ND				
tert-Butylbenzene	5	5	ND	ND	ND				
1,2,4-Trimethylbenzene	5	5	ND	ND	ND				
Sec-Butylbenzene	5	5	ND	ND	ND				
1,3-Dichlorobenzene	5	5	ND	ND	ND				
p-Isopropyltoluene	5	5	ND	ND	ND				
1,4-Dichlorobenzene	5	5	ND	ND	ND				
1,2-Dichlorobenzene	5	5	ND	ND	ND				
n-Butylbenzene	5	5	ND	ND	ND				
1,2,4-Trichlorobenzene	5	5	ND	ND	ND				
1,2-Dibromo-3-Chloropropane	5	5	ND	ND	ND				
Hexachlorobutadiene	5	5	ND	ND	ND				
Naphthalene	5	5	ND	ND	ND				
1,2,3-Trichlorobenzene	5	5	ND	ND	ND				
Acetone	25	25	ND	ND	ND				
2-Butanone (MEK)	25	25	ND	ND	ND				
Carbon disulfide	25	25	ND	ND	ND				
4-Methyl-2-pentanone	25	25	ND	ND	ND				
2-Hexanone	25	25	ND	ND	ND				
Vinyl Acetate	25	25	ND	ND	ND				
1,4-Dioxane	50	100	ND	ND	ND				
MTBE	2	2	ND	ND	ND				
ETBE	2	2	ND	ND	ND				
DIPE	2	2	ND	ND	ND				
TAME	2	2	ND	ND	ND				
T-Butyl Alcohol	10	10	ND	ND	ND				

MDL=Method Detection Limit; MB=Method Blank; ND=Not Detected (below DF × MDL).

ANCHEM0161

7801 Telegraph Road Suite L, Montebello, CA 90640 Phone: (323) 888-0728 Fax: (323) 888-1509

Southland Technical Services, Inc.
Environmental Laboratories

01-03-2003

EPA 8015M (TPH)
Batch QA/QC Report

Client:	Blakely Environmental Investigations, Inc.	Lab Job No.:	BL212127
Project:	Angeles Chemical Co.		
Matrix:	Water	Lab Sample ID:	R212111-1
Batch No.:	AL18-GW1	Date Analyzed:	12-18-2002

I. MS/MSD Report
Unit: ppb

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
TPH-g	ND	1000	1,010	1,070	101.0	107.0	5.8	30	70-130

II. LCS Result
Unit: ppb

Analyte	LCS Report Value	True Value	Rec.%	Accept. Limit
TPH-g	1,090	1,000	109.0	80-120

ND: Not Detected

ANCHEM0162

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Southland Technical Services, Inc.
Environmental Laboratories

01-03-2003

EPA 8260B
Batch QA/QC Report

Client:	Blakely Environmental Investigations, Inc.	Lab Job No.:	BL212127
Project:	Angeles Chemical Co.		
Matrix:	Water	Sample ID:	R212135-1
Batch No:	1219-VOAW	Date Analyzed:	12-19-2002

I. MS/MSD Report
Unit: ppb

Compound	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1,1-Dichloroethene	ND	20	18.1	21.8	90.5	109.0	18.5	30	70-130
Benzene	ND	20	20.7	24.7	103.5	123.5	17.6	30	70-130
Trichloro-ethene	ND	20	19.8	22.1	99.0	110.5	11.0	30	70-130
Toluene	ND	20	22.0	24.9	110.0	124.5	12.4	30	70-130
Chlorobenzene	ND	20	21.1	23.6	105.5	118.0	11.2	30	70-130

II. LCS Result
Unit: ppb

Analyte	LCS Value	True Value	Rec.%	Accept. Limit
1,1-Dichloroethene	19.2	20.0	96.0	80-120
Benzene	22.3	20.0	111.5	80-120
Trichloro-ethene	21.3	20.0	106.5	80-120
Toluene	22.2	20.0	111.0	80-120
Chlorobenzene	23.8	20.0	119.0	80-120

ND: Not Detected.

ANCHEM0163

7801 Telegraph Road Suite L, Montebello, CA 90640 Phone: (323) 888-0728 Fax: (323) 888-1509

SOUTHLAND TECHNICAL SERVICES, INC.

CHAIN OF CUSTODY RECORD

Lab Job Number BL 212130

Client: BEII

Address: 9605 Arrow Route, Suite T Rancho Cucamonga, CA

Report Attention | Phone: 909/989-9550 | Fax: 909/989-9556 | Sampled by: H.G.

Project Name/No. | Project Site

Client Sample ID	Lab Sample ID	Sample Collect: Date	Sample Collect: Time	Matrix Type	Sample Preserve	No.,type* & size of container	602/8021 (BTEX,MTBE)	8015M (Gasoline)	8015M (Diesel)	8260B (VOCs)	8260B (Oxygenates, BTEX)	8260B (MTBE Confirm.)	Remarks
MW-2	BL212130-1	12/10/02		Water	HCl	2-V		X		X			
MW-5	-2	"		"	"	"				X			
MW-14	-3	"		"	"	"		X		X			
MW-15	-4	"		"	"	"		X		X			
MW-20	-5	"		"	"	"		X		X			
MW-21	-6	"		"	"	"		X		X			
Trip Blank	-7	"		"	"	1-V		X		X			

ANCHEM0164

Relinquished by: Juan Garcia | Company: BEI | Date: 12/10/02 | Time: 3:34 p.m. | Received by | Company: STS

Relinquished by | Company | Date | Time | Received by | Company

T.A.T. Requested: ☐ Rush 8 12 24 hours ☐ 2-3 days ☒ Normal

Sample Condition: ☒ Chilled ☒ Intact ☐ Sample seals

Container types: M=Metal Tube, A=Air Bag, P=Plastic bottle, G=Glass bottle, V=VOA vial

Southland Tech. Services, Inc.
7801 Telegraph Road, Suite L & K
Montebello, CA 90640
Tel: (323) 888-0728
Fax: (323) 888-1509

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.
Distribution: WHITE with report, PINK to courier.

Southland Technical Services, Inc.
Environmental Laboratories

01-03-2003

Mr. Hiram Garcia
Blakely Environmental Investigations, Inc.
9605 Arrow Highway, Suite T
Rancho Cucamonga, CA 91730

Project: Angeles Chemical Co.
Project Site: 8915 Sorensen Ave., Santa Fe Springs, CA
Sample Date: 12-18-2002
Lab Job No.: BL212130

Dear Mr. Garcia:

Enclosed please find the analytical report for the sample(s) received by STS Environmental Laboratories on 12-18-2002 and analyzed for the following parameters:

EPA 8021B (BTEX,MTBE)/8015M (Gasoline)
EPA 8260B (VOC's by GC/MS)

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions (i.e., chilled, intact) and with a chain of custody record attached.

STS Environmental Laboratory is certified by CA DHS (Certificate Number 1986). Thank you for giving us the opportunity to serve you. Please feel free to call me at (323) 888-0728 if our laboratory can be of further service to you.

Sincerely,

Roger Wang, Ph. D.
Laboratory Director

Enclosures

This cover letter is an integral part of this analytical report.

ANCHEM0165

7801 Telegraph Road Suite L, Montebello, CA 90640 Phone: (323) 888-0728 Fax: (323) 888-1509

Southland Technical Services, Inc.
Environmental Laboratories

01-03-2003

Client:	Blakely Environmental Investigations, Inc.	Lab Job No.:	BL212130
Project:	Angeles Chemical Co.		
Project Site:	8915 Sorensen Ave., Santa Fe Springs, CA	Date Sampled:	12-18-2002
Matrix:	Water	Date Received:	12-18-2002
Batch No.:	AL19-GW1	Date Analyzed:	12-19-2002

EPA 8015M (Gasoline)
Reporting Units: µg/L (ppb)

Sample ID	Lab ID	Gasoline (C4-C12)	Method Detection Limit	PQL
Method Blank		ND	50	50
MW-2	BL212130-1	9,330	50	500
MW-14	BL212130-3	7,130	50	500
MW-15	BL212130-4	326	50	50
MW-20	BL212130-5	61	50	50
MW-21	BL212130-6	405	50	50
TRIP BLANK	BL212130-7	ND	50	50

ND: Not Detected (at the specified limit)

PQL: Practical Quantitation Limit.

ANCHEM0166

7801 Telegraph Road Suite L, Montebello, CA 90640 Phone: (323) 888-0728 Fax: (323) 888-1509

Southland Technical Services, Inc.
Environmental Laboratories

Client: Blakely Environmental Investigations, Inc. Lab Job No.: BL212130 Date Reported: 01-03-2003
Project:Angeles Chemical Co. Matrix: Water Date Sampled: 12-18-2002

EPA 8260B (VOCs by GC/MS, Page 1 of 2) Reporting Unit: ppb

DATE ANALYZED			12-19	12-19-02	12-19-02	12-19-02	12-19-02	12-19-02	12-19-02
DILUTION FACTOR				50	50	25	10	1	5
LAB SAMPLE I.D.				BL212130-1	BL212130-2	BL212130-3	BL212130-4	BL212130-5	BL212130-6
CLIENT SAMPLE I.D.				MW-2	MW-5	MW-14	MW-15	MW-20	MW-21
COMPOUND	MDL	PQL	MB						
Dichlorodifluoromethane	5	5	ND	ND	ND	ND	ND	ND	ND
Chloromethane	5	5	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	2	2	ND	2,720	3,480	ND	93.1	ND	28.1
Bromomethane	5	5	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5	5	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5	5	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	5	ND	2,230	2,950	142	52.4	25.6	207
Iodomethane	5	5	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	5	5	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	5	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	5	ND	1,920	2,460	171	79.8	16.2	141
2,2-Dichloropropane	5	5	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	5	ND	11,800	15,500	664	332	9.3	324
Bromochloromethane	5	5	ND	ND	ND	ND	ND	ND	ND
Chloroform	5	5	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	5	5	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	5	ND	ND	ND	230	ND	ND	ND
Carbon tetrachloride	5	5	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	5	5	ND	ND	ND	ND	ND	ND	ND
Benzene	1	1	ND	180	239	ND	ND	ND	7.9
Trichloroethene	2	2	ND	ND	ND	ND	ND	2.9	55.7
1,2-Dichloropropane	5	5	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	5	5	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	5	5	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	5	5	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	5	5	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	5	5	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	5	5	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	5	5	ND	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	5	5	ND	ND	ND	ND	ND	ND	ND
Bromoform	5	5	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5	5	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	5	5	ND	ND	ND	ND	ND	ND	ND

ANCHEM0167

7801 Telegraph Road Suite L, Montebello, CA 90640 Phone: (323) 888-0728 Fax: (323) 888-1509

Southland Technical Services, Inc.
Environmental Laboratories

Client: Blakely Environmental Investigations, Inc. Lab Job No.: BL212130 Date Reported: 01-03-2003
Project:Angeles Chemical Co. Matrix: Water Date Sampled: 12-18-2002

EPA 8260B (VOCs by GC/MS, Page 2 of 2) Reporting Unit: (ppb)

COMPOUND	MDL	PQL	MB	MW-2	MW-5	MW-14	MW-15	MW-20	MW-21
Toluene	1	1	ND	158	185	2,840	14.4	3.3	6.7
Tetrachloroethene	2	2	ND	ND	ND	ND	ND	9.7	53.1
1,2-Dibromoethane(EDB)	5	5	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	5	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethan	5	5	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1	1	ND	590	751	334	ND	ND	ND
Total Xylenes	1	1	ND	355	404	1,760	ND	ND	ND
Styrene	5	5	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethan	5	5	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	5	5	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	5	5	ND	ND	ND	ND	ND	ND	ND
2-Chlorotoluene	5	5	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	5	5	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	5	ND	ND	ND	106J	ND	ND	ND
tert-Butylbenzene	5	5	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	5	5	ND	232J	278	270	ND	ND	ND
Sec-Butylbenzene	5	5	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5	5	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	5	5	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	5	5	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5	5	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	5	5	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5	5	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	5	5	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	5	5	ND	ND	ND	ND	ND	ND	ND
Naphthalene	5	5	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	5	5	ND	ND	ND	ND	ND	ND	ND
Acetone	25	25	ND	ND	ND	ND	ND	ND	ND
2-Butanone (MEK)	25	25	ND	ND	ND	ND	ND	ND	ND
Carbon disulfide	25	25	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	25	25	ND	ND	ND	ND	ND	ND	ND
2-Hexanone	25	25	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	25	25	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane	50	100	ND	ND	ND	ND	ND	176	ND
MTBE	2	2	ND	ND	ND	ND	ND	ND	ND
ETBE	2	2	ND	ND	ND	ND	ND	ND	ND
DIPE	2	2	ND	ND	ND	ND	ND	ND	ND
TAME	2	2	ND	ND	ND	ND	ND	ND	ND
T-Butyl Alcohol	10	10	ND	ND	ND	ND	ND	ND	ND

MDL=Method Detection Limit; MB=Method Blank; ND=Not Detected (below DF × MDL).

ANCHEM0168

7801 Telegraph Road Suite L, Montebello, CA 90640 Phone: (323) 888-0728 Fax: (323) 888-1509

Southland Technical Services, Inc.
Environmental Laboratories

Client: Blakely Environmental Investigations, Inc. Lab Job No.: BL212130 Date Reported: 01-03-2003
Project:Angeles Chemical Co. Matrix: Water Date Sampled: 12-18-2002

EPA 8260B (VOCs by GC/MS, Page 1 of 2) Reporting Unit: ppb

DATE ANALYZED			12-19	12-19-02					
DILUTION FACTOR				1					
LAB SAMPLE I.D.				BL212130-7					
CLIENT SAMPLE I.D.				Trip Blank					
COMPOUND	**MDL**	**PQL**	**MB**						
Dichlorodifluoromethane	5	5	ND	ND					
Chloromethane	5	5	ND	ND					
Vinyl Chloride	2	2	ND	ND					
Bromomethane	5	5	ND	ND					
Chloroethane	5	5	ND	ND					
Trichlorofluoromethane	5	5	ND	ND					
1,1-Dichloroethene	5	5	ND	ND					
Iodomethane	5	5	ND	ND					
Methylene Chloride	5	5	ND	ND					
trans-1,2-Dichloroethene	5	5	ND	ND					
1,1-Dichloroethane	5	5	ND	ND					
2,2-Dichloropropane	5	5	ND	ND					
cis-1,2-Dichloroethene	5	5	ND	ND					
Bromochloromethane	5	5	ND	ND					
Chloroform	5	5	ND	ND					
1,2-Dichloroethane	5	5	ND	ND					
1,1,1-Trichloroethane	5	5	ND	ND					
Carbon tetrachloride	5	5	ND	ND					
1,1-Dichloropropene	5	5	ND	ND					
Benzene	1	1	ND	ND					
Trichloroethene	2	2	ND	ND					
1,2-Dichloropropane	5	5	ND	ND					
Bromodichloromethane	5	5	ND	ND					
Dibromomethane	5	5	ND	ND					
trans-1,3-Dichloropropene	5	5	ND	ND					
cis-1,3-Dichloropropene	5	5	ND	ND					
1,1,2-Trichloroethane	5	5	ND	ND					
1,3-Dichloropropane	5	5	ND	ND					
Dibromochloromethane	5	5	ND	ND					
2-Chloroethylvinyl ether	5	5	ND	ND					
Bromoform	5	5	ND	ND					
Isopropylbenzene	5	5	ND	ND					
Bromobenzene	5	5	ND	ND					

ANCHEM0169

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Southland Technical Services, Inc.
Environmental Laboratories

Client: Blakely Environmental Investigations, Inc. Lab Job No.: BL212130 Date Reported: 01-03-2003
Project:Angeles Chemical Co. Matrix: Water Date Sampled: 12-18-2002

EPA 8260B (VOCs by GC/MS, Page 2 of 2) Reporting Unit: (ppb)

COMPOUND	MDL	PQL	MB	Trip Blank					
Toluene	1	1	ND	ND					
Tetrachloroethene	2	2	ND	ND					
1,2-Dibromoethane(EDB)	5	5	ND	ND					
Chlorobenzene	5	5	ND	ND					
1,1,1,2-Tetrachloroethan	5	5	ND	ND					
Ethylbenzene	1	1	ND	ND					
Total Xylenes	1	1	ND	ND					
Styrene	5	5	ND	ND					
1,1,2,2-Tetrachloroethan	5	5	ND	ND					
1,2,3-Trichloropropane	5	5	ND	ND					
n-Propylbenzene	5	5	ND	ND					
2-Chlorotoluene	5	5	ND	ND					
4-Chlorotoluene	5	5	ND	ND					
1,3,5-Trimethylbenzene	5	5	ND	ND					
tert-Butylbenzene	5	5	ND	ND					
1,2,4-Trimethylbenzene	5	5	ND	ND					
Sec-Butylbenzene	5	5	ND	ND					
1,3-Dichlorobenzene	5	5	ND	ND					
p-Isopropyltoluene	5	5	ND	ND					
1,4-Dichlorobenzene	5	5	ND	ND					
1,2-Dichlorobenzene	5	5	ND	ND					
n-Butylbenzene	5	5	ND	ND					
1,2,4-Trichlorobenzene	5	5	ND	ND					
1,2-Dibromo-3-Chloropropane	5	5	ND	ND					
Hexachlorobutadiene	5	5	ND	ND					
Naphthalene	5	5	ND	ND					
1,2,3-Trichlorobenzene	5	5	ND	ND					
Acetone	25	25	ND	ND					
2-Butanone (MEK)	25	25	ND	ND					
Carbon disulfide	25	25	ND	ND					
4-Methyl-2-pentanone	25	25	ND	ND					
2-Hexanone	25	25	ND	ND					
Vinyl Acetate	25	25	ND	ND					
1,4-Dioxane	50	100	ND	ND					
MTBE	2	2	ND	ND					
ETBE	2	2	ND	ND					
DIPE	2	2	ND	ND					
TAME	2	2	ND	ND					
T-Butyl Alcohol	10	10	ND	ND					

MDL=Method Detection Limit; MB=Method Blank; ND=Not Detected (below DF × MDL).

ANCHEM0170

7801 Telegraph Road Suite L, Montebello, CA 90640 Phone: (323) 888-0728 Fax: (323) 888-1509

Southland Technical Services, Inc.
Environmental Laboratories

01-03-2003

EPA 8015M (TPH)
Batch QA/QC Report

Client:	Blakely Environmental Investigations, Inc.	Lab Job No.:	BL212130
Project:	Angeles Chemical Co.		
Matrix:	Water	Lab Sample ID:	BL212130-4
Batch No.:	AL19-GW1	Date Analyzed:	12-19-2002

I. MS/MSD Report
Unit: ppb

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
TPH-g	326	1000	1,330	1,340	100.3	101.1	0.8	30	70-130

II. LCS Result
Unit: ppb

Analyte	LCS Report Value	True Value	Rec.%	Accept. Limit
TPH-g	1,060	1,000	106.0	80-120

ND: Not Detected

ANCHEM0171

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Southland Technical Services, Inc.
Environmental Laboratories

01-03-2003

EPA 8260B
Batch QA/QC Report

Client:	Blakely Environmental Investigations, Inc.	Lab Job No.:	BL212130
Project:	Angeles Chemical Co.		
Matrix:	Water	Sample ID:	R212135-1
Batch No:	1219-VOAW	Date Analyzed:	12-19-2002

I. MS/MSD Report
Unit: ppb

Compound	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1,1-Dichloroethene	ND	20	18.1	21.8	90.5	109.0	18.5	30	70-130
Benzene	ND	20	20.7	24.7	103.5	123.5	17.6	30	70-130
Trichloro-ethene	ND	20	19.8	22.1	99.0	110.5	11.0	30	70-130
Toluene	ND	20	22.0	24.9	110.0	124.5	12.4	30	70-130
Chlorobenzene	ND	20	21.1	23.6	105.5	118.0	11.2	30	70-130

II. LCS Result
Unit: ppb

Analyte	LCS Value	True Value	Rec.%	Accept. Limit
1,1-Dichloroethene	19.2	20.0	96.0	80-120
Benzene	22.3	20.0	111.5	80-120
Trichloro-ethene	21.3	20.0	106.5	80-120
Toluene	22.2	20.0	111.0	80-120
Chlorobenzene	23.8	20.0	119.0	80-120

ND: Not Detected.

ANCHEM0172

7801 Telegraph Road Suite L, Montebello, CA 90640 Phone: (323) 888-0728 Fax: (323) 888-1509

SOUTHLAND TECHNICAL SERVICES, INC.

CHAIN OF CUSTODY RECORD

Lab Job Number BL212145

Client: BEII

Address: 9605 Arrow Route, Suite T Rancho Cucamonga 91730

Report Attention | Phone: 909 989 9550 | Fax: 909 989 4550 | Sampled by: WSAB

Project Name/No. | Project Site

T.A.T. Requested: ☐ Rush 8 12 24 hours ☐ 2-3 days ☒ Normal

Sample Condition: ☒ Chilled ☒ Intact ☐ Sample seals

Client Sample ID	Lab Sample ID	Sample Collect Date	Sample Collect Time	Matrix Type	Sample Preserve	No.,type* & size of container	602/8021 (BTEX,MTBE)	8015M (Gasoline)	8015M (Diesel)	8260B (VOCs)	8260B (Oxygenates, BTEX)	8260B (MTBE Confirm.)	Remarks
MW-11	BL212145-3	12/19/02		Water	HCL	2-V		X		X			
MW-3	-1	"		"	"	"		X		X			
MW-10	-2	"		"	"	"		X		X			
MW-12	-6	"		"	"	"				X			
MW-18	-4	"		"	"	"		X		X			
MW-19	-5	"		"	"	"		X		X			
TRIP BLANK	-7	"		"	"	1-V		X		X			

ANCHEM0173

Relinquished by	Company	Date	Time	Received by	Company	Container types:	
Wendy S. Burum	BEII	12-19-02	1525		STS 12-19-02 15:15	A=Air Bag	P=Plastic bottle
Relinquished by	Company	Date	Time	Received by	Company	G=Glass bottle	V=VOA vial
							M=Metal Tube

Southland Tech. Services, Inc.
7801 Telegraph Road, Suite L & K
Montebello, CA 90640
Tel: (323) 888-0728
Fax: (323) 888-1509

Note: Samples are discarded 30 days after results are reported unless other arrangements are made. Hazardous samples will be returned to client or disposed of at client's expense.
Distribution: WHITE with report, PINK to courier.

Southland Technical Services, Inc.
Environmental Laboratories

01-03-2003

Mr. Hiram Garcia
Blakely Environmental Investigations, Inc.
9605 Arrow Highway, Suite T
Rancho Cucamonga, CA 91730

Project: Angeles Chemical Co.
Project Site: 8915 Sorensen Ave., Santa Fe Springs, CA
Sample Date: 12-19-2002
Lab Job No.: BL212145

Dear Mr. Garcia:

Enclosed please find the analytical report for the sample(s) received by STS Environmental Laboratories on 12-19-2002 and analyzed for the following parameters:

EPA 8021B (BTEX,MTBE)/8015M (Gasoline)
EPA 8260B (VOC's by GC/MS)

All analyses have met the QA/QC criteria of this laboratory.

The sample(s) arrived in good conditions (i.e., chilled, intact) and with a chain of custody record attached.

STS Environmental Laboratory is certified by CA DHS (Certificate Number 1986). Thank you for giving us the opportunity to serve you. Please feel free to call me at (323) 888-0728 if our laboratory can be of further service to you.

Sincerely,

Roger Wang, Ph. D.
Laboratory Director

Enclosures

This cover letter is an integral part of this analytical report.

ANCHEM0174

7801 Telegraph Road Suite L, Montebello, CA 90640 Phone: (323) 888-0728 Fax: (323) 888-1509

Southland Technical Services, Inc.
Environmental Laboratories

01-03-2003

Client:	Blakely Environmental Investigations, Inc.	Lab Job No.:	BL212145
Project:	Angeles Chemical Co.		
Project Site:	8915 Sorensen Ave., Santa Fe Springs, CA	Date Sampled:	12-19-2002
Matrix:	Water	Date Received:	12-19-2002
Batch No.:	CL19-GW1	Date Analyzed:	12-19-2002

EPA 8015M (Gasoline)
Reporting Units: µg/L (ppb)

Sample ID	Lab ID	Gasoline (C4-C12)	Method Detection Limit	PQL
Method Blank		ND	50	50
MW-3	BL212145-1	11,400	50	500
MW-10	BL212145-2	68,300	50	500
MW-11	BL212145-3	22,600	50	500
MW-18	BL212145-4	41,700	50	50
MW-19	BL212145-5	107,000	50	50
TRIP BLANK	BL212145-7	ND	50	50

ND: Not Detected (at the specified limit)

PQL: Practical Quantitation Limit.

ANCHEM0175

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Southland Technical Services, Inc.
Environmental Laboratories

Client: Blakely Environmental Investigations, Inc.
Project:Angeles Chemical Co.

Lab Job No.: BL212145
Matrix: Water

Date Reported: 01-03-2003
Date Sampled: 12-19-2002

EPA 8260B (VOCs by GC/MS, Page 1 of 2) Reporting Unit: ppb

DATE ANALYZED			12-19	12-19-02	12-19-02	12-19-02	12-19-02	12-19-02	12-19-02
DILUTION FACTOR				50	500	25	100	500	50
LAB SAMPLE I.D.				BL212145-1	BL212145-2	BL212145-3	BL212145-4	BL212145-5	BL212145-6
CLIENT SAMPLE I.D.				MW-3	MW-10	MW-11	MW-18	MW-19	MW-22
COMPOUND	MDL	PQL	MB						
Dichlorodifluoromethane	5	5	ND	ND	ND	ND	ND	ND	ND
Chloromethane	5	5	ND	ND	ND	ND	ND	ND	ND
Vinyl Chloride	2	2	ND	12,700	4,100	198	ND	ND	13,200
Bromomethane	5	5	ND	ND	ND	ND	ND	ND	ND
Chloroethane	5	5	ND	ND	ND	ND	ND	ND	ND
Trichlorofluoromethane	5	5	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethene	5	5	ND	196J	2,640	3,460	6,850	17,700	215J
Iodomethane	5	5	ND	ND	ND	ND	ND	ND	ND
Methylene Chloride	5	5	ND	ND	ND	ND	ND	ND	ND
trans-1,2-Dichloroethene	5	5	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloroethane	5	5	ND	1,190	42,400	19,400	4,390	5,150	1,270
2,2-Dichloropropane	5	5	ND	ND	ND	ND	ND	ND	ND
cis-1,2-Dichloroethene	5	5	ND	595	23,300	6,700	18,100	11,800	331
Bromochloromethane	5	5	ND	ND	ND	ND	ND	ND	ND
Chloroform	5	5	ND	ND	ND	ND	ND	ND	ND
1,2-Dichloroethane	5	5	ND	ND	ND	ND	ND	ND	ND
1,1,1-Trichloroethane	5	5	ND	ND	13,800	52.8J	1,150	21,500	ND
Carbon tetrachloride	5	5	ND	ND	ND	ND	ND	ND	ND
1,1-Dichloropropene	5	5	ND	ND	ND	ND	ND	ND	ND
Benzene	1	1	ND	137	ND	431	610	1,160	131
Trichloroethene	2	2	ND	ND	ND	ND	946	1,740	ND
1,2-Dichloropropane	5	5	ND	ND	ND	ND	ND	ND	ND
Bromodichloromethane	5	5	ND	ND	ND	ND	ND	ND	ND
Dibromomethane	5	5	ND	ND	ND	ND	ND	ND	ND
trans-1,3-Dichloropropene	5	5	ND	ND	ND	ND	ND	ND	ND
cis-1,3-Dichloropropene	5	5	ND	ND	ND	ND	ND	ND	ND
1,1,2-Trichloroethane	5	5	ND	ND	ND	ND	ND	ND	ND
1,3-Dichloropropane	5	5	ND	ND	ND	ND	ND	ND	ND
Dibromochloromethane	5	5	ND	ND	ND	ND	ND	ND	ND
2-Chloroethylvinyl ether	5	5	ND	ND	ND	ND	ND	ND	ND
Bromoform	5	5	ND	ND	ND	ND	ND	ND	ND
Isopropylbenzene	5	5	ND	ND	ND	ND	ND	ND	ND
Bromobenzene	5	5	ND	ND	ND	ND	ND	ND	ND

ANCHEM0176

7801 Telegraph Road Suite L, Montebello, CA 90640 Phone: (323) 888-0728 Fax: (323) 888-1509

Southland Technical Services, Inc.
Environmental Laboratories

Client: Blakely Environmental Investigations, Inc. Lab Job No.: BL212145 Date Reported: 01-03-2003
Project:Angeles Chemical Co. Matrix: Water Date Sampled: 12-19-2002

EPA 8260B (VOCs by GC/MS, Page 2 of 2) Reporting Unit: (ppb)

COMPOUND	MDL	PQL	MB	MW-3	MW-10	MW-11	MW-18	MW-19	MW-22
Toluene	1	1	ND	5,770	19,600	1,230	1,730	13,500	6,700
Tetrachloroethene	2	2	ND	ND	ND	ND	534	1,240	ND
1,2-Dibromoethane(EDB)	5	5	ND	ND	ND	ND	ND	ND	ND
Chlorobenzene	5	5	ND	ND	ND	ND	ND	ND	ND
1,1,1,2-Tetrachloroethan	5	5	ND	ND	ND	ND	ND	ND	ND
Ethylbenzene	1	1	ND	1,150	1,480	967	425	1,710	1,180
Total Xylenes	1	1	ND	2,900	4,690	748	2,690	3,940	3,100
Styrene	5	5	ND	ND	ND	ND	ND	ND	ND
1,1,2,2-Tetrachloroethan	5	5	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichloropropane	5	5	ND	ND	ND	ND	ND	ND	ND
n-Propylbenzene	5	5	ND	ND	ND	259	ND	ND	ND
2-Chlorotoluene	5	5	ND	ND	ND	ND	ND	ND	ND
4-Chlorotoluene	5	5	ND	ND	ND	ND	ND	ND	ND
1,3,5-Trimethylbenzene	5	5	ND	ND	ND	675	528	ND	ND
tert-Butylbenzene	5	5	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trimethylbenzene	5	5	ND	356	ND	2,120	1,880	2,500	345
Sec-Butylbenzene	5	5	ND	ND	ND	ND	ND	ND	ND
1,3-Dichlorobenzene	5	5	ND	ND	ND	ND	ND	ND	ND
p-Isopropyltoluene	5	5	ND	ND	ND	ND	ND	ND	ND
1,4-Dichlorobenzene	5	5	ND	ND	ND	ND	ND	ND	ND
1,2-Dichlorobenzene	5	5	ND	ND	ND	ND	ND	ND	ND
n-Butylbenzene	5	5	ND	ND	ND	ND	ND	ND	ND
1,2,4-Trichlorobenzene	5	5	ND	ND	ND	ND	ND	ND	ND
1,2-Dibromo-3-Chloropropane	5	5	ND	ND	ND	ND	ND	ND	ND
Hexachlorobutadiene	5	5	ND	ND	ND	ND	ND	ND	ND
Naphthalene	5	5	ND	ND	ND	ND	ND	ND	ND
1,2,3-Trichlorobenzene	5	5	ND	ND	ND	ND	ND	ND	ND
Acetone	25	25	ND	ND	29,900	662	26,000	70,000	ND
2-Butanone (MEK)	25	25	ND	ND	15,300	1,160	9,300	18,500	ND
Carbon disulfide	25	25	ND	ND	ND	ND	ND	ND	ND
4-Methyl-2-pentanone	25	25	ND	ND	ND	3,540	ND	ND	1,560
2-Hexanone	25	25	ND	ND	ND	ND	ND	ND	ND
Vinyl Acetate	25	25	ND	ND	ND	ND	ND	ND	ND
1,4-Dioxane	50	100	ND	ND	ND	ND	ND	ND	ND
MTBE	2	2	ND	ND	ND	ND	ND	ND	ND
ETBE	2	2	ND	ND	ND	ND	ND	ND	ND
DIPE	2	2	ND	ND	ND	ND	ND	ND	ND
TAME	2	2	ND	ND	ND	ND	ND	ND	ND
T-Butyl Alcohol	10	10	ND	ND	ND	ND	ND	ND	ND

MDL=Method Detection Limit; MB=Method Blank; ND=Not Detected (below DF × MDL).

ANCHEM0177

7801 Telegraph Road Suite L, Montebello, CA 90640 Phone: (323) 888-0728 Fax: (323) 888-1509

Southland Technical Services, Inc.

Environmental Laboratories

Client: Blakely Environmental Investigations, Inc.
Project:Angeles Chemical Co.

Lab Job No.: BL212145
Matrix: Water

Date Reported: 01-03-2003
Date Sampled: 12-19-2002

EPA 8260B (VOCs by GC/MS, Page 1 of 2) Reporting Unit: ppb

DATE ANALYZED			12-19	12-19-02					
DILUTION FACTOR				1					
LAB SAMPLE I.D.				BL212145-7					
CLIENT SAMPLE I.D.				Trip Blank					
COMPOUND	MDL	PQL	MB						
Dichlorodifluoromethane	5	5	ND	ND					
Chloromethane	5	5	ND	ND					
Vinyl Chloride	2	2	ND	ND					
Bromomethane	5	5	ND	ND					
Chloroethane	5	5	ND	ND					
Trichlorofluoromethane	5	5	ND	ND					
1,1-Dichloroethene	5	5	ND	ND					
Iodomethane	5	5	ND	ND					
Methylene Chloride	5	5	ND	ND					
trans-1,2-Dichloroethene	5	5	ND	ND					
1,1-Dichloroethane	5	5	ND	ND					
2,2-Dichloropropane	5	5	ND	ND					
cis-1,2-Dichloroethene	5	5	ND	ND					
Bromochloromethane	5	5	ND	ND					
Chloroform	5	5	ND	ND					
1,2-Dichloroethane	5	5	ND	ND					
1,1,1-Trichloroethane	5	5	ND	ND					
Carbon tetrachloride	5	5	ND	ND					
1,1-Dichloropropene	5	5	ND	ND					
Benzene	1	1	ND	ND					
Trichloroethene	2	2	ND	ND					
1,2-Dichloropropane	5	5	ND	ND					
Bromodichloromethane	5	5	ND	ND					
Dibromomethane	5	5	ND	ND					
trans-1,3-Dichloropropene	5	5	ND	ND					
cis-1,3-Dichloropropene	5	5	ND	ND					
1,1,2-Trichloroethane	5	5	ND	ND					
1,3-Dichloropropane	5	5	ND	ND					
Dibromochloromethane	5	5	ND	ND					
2-Chloroethylvinyl ether	5	5	ND	ND					
Bromoform	5	5	ND	ND					
Isopropylbenzene	5	5	ND	ND					
Bromobenzene	5	5	ND	ND					

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Southland Technical Services, Inc.

Environmental Laboratories

Client: Blakely Environmental Investigations, Inc.
Project:Angeles Chemical Co.

Lab Job No.: BL212145
Matrix: Water

Date Reported: 01-03-2003
Date Sampled: 12-19-2002

EPA 8260B (VOCs by GC/MS, Page 2 of 2) Reporting Unit: (ppb)

COMPOUND	MDL	PQL	MB	Trip Blank					
Toluene	1	1	ND	ND					
Tetrachloroethene	2	2	ND	ND					
1,2-Dibromoethane(EDB)	5	5	ND	ND					
Chlorobenzene	5	5	ND	ND					
1,1,1,2-Tetrachloroethan	5	5	ND	ND					
Ethylbenzene	1	1	ND	ND					
Total Xylenes	1	1	ND	ND					
Styrene	5	5	ND	ND					
1,1,2,2-Tetrachloroethan	5	5	ND	ND					
1,2,3-Trichloropropane	5	5	ND	ND					
n-Propylbenzene	5	5	ND	ND					
2-Chlorotoluene	5	5	ND	ND					
4-Chlorotoluene	5	5	ND	ND					
1,3,5-Trimethylbenzene	5	5	ND	ND					
tert-Butylbenzene	5	5	ND	ND					
1,2,4-Trimethylbenzene	5	5	ND	ND					
Sec-Butylbenzene	5	5	ND	ND					
1,3-Dichlorobenzene	5	5	ND	ND					
p-Isopropyltoluene	5	5	ND	ND					
1,4-Dichlorobenzene	5	5	ND	ND					
1,2-Dichlorobenzene	5	5	ND	ND					
n-Butylbenzene	5	5	ND	ND					
1,2,4-Trichlorobenzene	5	5	ND	ND					
1,2-Dibromo-3-Chloropropane	5	5	ND	ND					
Hexachlorobutadiene	5	5	ND	ND					
Naphthalene	5	5	ND	ND					
1,2,3-Trichlorobenzene	5	5	ND	ND					
Acetone	25	25	ND	ND					
2-Butanone (MEK)	25	25	ND	ND					
Carbon disulfide	25	25	ND	ND					
4-Methyl-2-pentanone	25	25	ND	ND					
2-Hexanone	25	25	ND	ND					
Vinyl Acetate	25	25	ND	ND					
1,4-Dioxane	50	100	ND	ND					
MTBE	2	2	ND	ND					
ETBE	2	2	ND	ND					
DIPE	2	2	ND	ND					
TAME	2	2	ND	ND					
T-Butyl Alcohol	10	10	ND	ND					

MDL=Method Detection Limit; MB=Method Blank; ND=Not Detected (below DF × MDL).

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Southland Technical Services, Inc.
Environmental Laboratories

01-03-2003

EPA 8015M (TPH)
Batch QA/QC Report

Client:	Blakely Environmental Investigations, Inc.	Lab Job No.:	BL212145
Project:	Angeles Chemical Co.		
Matrix:	Water	Lab Sample ID:	G212141-3
Batch No.:	CL19-GW1	Date Analyzed:	12-19-2002

I. MS/MSD Report
Unit: ppb

Analyte	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
TPH-g	ND	1000	918	838	91.8	83.8	9.1	30	70-130

II. LCS Result
Unit: ppb

Analyte	LCS Report Value	True Value	Rec.%	Accept. Limit
TPH-g	1,070	1,000	107.0	80-120

ND: Not Detected

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Southland Technical Services, Inc.
Environmental Laboratories

01-03-2003

EPA 8260B
Batch QA/QC Report

Client:	Blakely Environmental Investigations, Inc.	Lab Job No.:	BL212145
Project:	Angeles Chemical Co.		
Matrix:	Water	Sample ID:	R212135-1
Batch No:	1219-VOAW	Date Analyzed:	12-19-2002

I. MS/MSD Report
Unit: ppb

Compound	Sample Conc.	Spike Conc.	MS	MSD	MS %Rec.	MSD %Rec.	% RPD	%RPD Accept. Limit	%Rec Accept. Limit
1,1-Dichloroethene	ND	20	18.1	21.8	90.5	109.0	18.5	30	70-130
Benzene	ND	20	20.7	24.7	103.5	123.5	17.6	30	70-130
Trichloro-ethene	ND	20	19.8	22.1	99.0	110.5	11.0	30	70-130
Toluene	ND	20	22.0	24.9	110.0	124.5	12.4	30	70-130
Chlorobenzene	ND	20	21.1	23.6	105.5	118.0	11.2	30	70-130

II. LCS Result
Unit: ppb

Analyte	LCS Value	True Value	Rec.%	Accept. Limit
1,1-Dichloroethene	19.2	20.0	96.0	80-120
Benzene	22.3	20.0	111.5	80-120
Trichloro-ethene	21.3	20.0	106.5	80-120
Toluene	22.2	20.0	111.0	80-120
Chlorobenzene	23.8	20.0	119.0	80-120

ND: Not Detected.

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THE

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GROUP

Protecting Your Quality Of Life

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Cell: (949) 357-0086

June 9, 2003

Ryan Kinsella
Hazardous Substances Scientist/Project Manager
Cal-EPA
Department of Toxic Substances Control
1011 N. Grandview Avenue
Glendale, CA 91201-2205

Reference: 2002 4th Quarter Groundwater Monitoring Report

Dear Mr. Kinsella,

Enclosed please find two copies of the 2002 4th Quarter Groundwater Monitoring Report for the Former Angeles Chemical Company Facility, located at 8915 Sorensen Avenue, Santa Fe Springs, California. This data report has been prepared by Blakely Environmental Investigations, Inc (BEI). The data had previously been provided to you and the Department. Please note that a CD containing an electronic version of the report and the data is attached to the inside cover of one the three copies enclosed.

If you have any questions regarding this report, please contact either Hiram Garcia of BEI (760-868-8572) or myself (949-248-5873).

Sincerely,

David J. Leu, Ph. D.
President
The Leu Group

djl

Enclosures (2)

c: Joe Kennedy (Grieve Financial)
Wade Allmon (Stone and Webster)
Jean-Pierre Salgado (Fireman's Fund)
Jeff Caulfield (Trutanich Michel)

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